```
4, 2005, 06:10:25; Search time 33.5 Seconds (without alignments) 871.180 Million cell updates/sec
                                                                                                                                                                                                                                         US-10-084-507B-22
1809
1 MGSLYSEYLNPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/1/iaa/5_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6_COMB.pep:*
/cgn2_6/ptodata/1/iaa/F_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
/cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                    572060 segs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                              OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued Patents AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                               December
                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                              Title:
```

ALIGNMENTS

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 12, Appl Sequence 19, Appl Sequence 5, Appli Sequence 10, Appl Sequence 2, Appli Sequence 2, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 4, Appli Sequence 2, Appli Sequence 3, Appli Sequence 3, Appli Appl Sequence 24, Sequence 24, Sequence 2, Sequence 2, Sequence 4, Sequence 4, Sequence 3, Sequence 28, Sequence 18, Sequence 1 Description Sequence Sequence Sequence Sequence US-09-580-2004-12 US-09-580-2004-12 US-09-582-2004-2 US-09-582-2004-10 US-09-582-2008-10 US-09-274-752D-3 US-08-196-98EB-2 US-08-16-2008-11 US-08-16-2050-24 US-09-25-2004-12 US-09-25-2004-2 US-09-25-477-2 US-08-196-9898-4 US-08-196-9898-4 US-08-196-9898-4 US-08-196-9898-4 US-08-196-9898-4 US-08-196-986-4 US-08-196-986-4 US-08-196-986-4 US-08-467-948A-28 US-08-852-824-18 US-08-467-947A-28 US-09-731-030A-17 US-09-518-383-18 PCT-US96-10618-4 US-09-169-205D-21 US-08-845-566-3 SUMMARIES Query Match Length DB 1809 1809 1809 1809 1803 1803 1803 1625.5 1625.5 1625.5 836.5 836.5 836.5 836.5 836.5 Score 831 Result

TYPE: PRT ORGANISM: Homo sapiens

US-09-582-200A-4

ò

ò

Sequence 2, Appli Sequence 22, Appl	Sequence 18, Appl	Sequence 73, Appl	Sequence 73, Appl	Sequence 30, Appl	Seguence 11, Appl	Sequence 13, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 3, Appli	Sequence 20, Appl	Sequence 2, Appli	Sequence 2, Appli	Sequence 15, Appl	Sequence 2, Appli	Sequence 23, Appl	Sequence 1, Appli
US-09-546-117-2 US-09-169-205D-22	US-09-731-030A-18	US-08-118-270-73	PCT-US93-08528-73	US-09-875-076-30	US-09-731-030A-11	US-09-731-030A-13	US-08-852-824-4	US-09-518-383-4	PCT-US96-10618-3	US-09-169-205D-20	US-08-763-938-2	PCT-US96-10618-2	US-09-731-030A-15	US-09-811-838-2	US-09-169-205D-23	US-09-274-752D-1
0 0	~	-	4	7	~	~	~	~	4	~	~	4	~	7	~	~
378 378	378	334	334	200	384	384	384	384	393	364	364	364	364	364	382	382
42.5	42.5	42.2	42.2													
769 769	769	763	763	720.5	535	531	523	523	515	512	511	509	206	206	492	492
80 0	0	_	~	m	4	ß	9	7	80	6	0		~	<u>س</u>	4	'n

RESULT 1
US-09-582-200A-4

US-09-582-200A-4

Sequence 4, Application US/09582200A

Sequence 4, Application US/09582200A

Sequence 4, Application US/09582200A

Setent No. 6482609

GENERAL INFORMATION:
APPLICANT: Munroe, Donald G.
APPLICANT: Kooheah, Ratemeh

APPLICANT: Kooheah, Ratemeh

APPLICANT: Mosheah, Ratemeh

APPLICANT: House, Dana

TITLE OF INNVINTION: IDENTIFICATION NOWBER: US/09/582,200A

CURRENT APPLICATION NUMBER: US/09/582,200A

CURRENT APPLICATION NUMBER: 60/109,885

PRIOR PILING DATE: 1998-12-30

PRIOR PLING DATE: 1998-12-30

PRIOR PLING DATE: 1998-12-30

PRIOR PLING DATE: 1998-12-30

PRIOR APPLICATION NUMBER: 60/010,885

PRIOR PLING DATE: 1998-04-03

PRIOR PLING DATE: 1998-12-30

PRIOR PLING DATE: 1998-12-30 SEQ ID NO 4

ö 121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVIGGLPILGWNCLGHLEACS 180 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120 181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240 1 MGSLYSEYLNPNKYQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 61 NSKFHSAMYLFIGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFARBGSAFITLSASV MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR Gaps ö 100.0%; Score 1809; DB 2; Length 353; 100.0%; Pred. No. 8.7e-146; ive 0; Mismatches 0; Indels 0 Query Match Best Local Similarity 100. Matches 353, Conservative ద B 셤 ઠે ò

ò g 8 g

```
Sequence 12, Application US/09582200A

Sequence 12, Application US/09582200A

Baten No. 6482609

GENERAL INFORMATION:
APPLICANT: Ramboj, Rajender
APPLICANT: Kanboj, Rajender
APPLICANT: Kooshesh, Fatemeh
APPLICANT: Gupta, Ashwani
ITILE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE;
FILE REFERENCE: 108074-00002
CURRENT APPLICATION NUMBER: US/09/582,200A
FILE REFERENCE: 1998-12-30
CURRENT APPLICATION NUMBER: DOY/22,995
PRIOR PLING DATE: 1998-12-30
PRIOR PLING DATE: 1998-11-25
PRIOR PLING DATE: 1998-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 VFIVCWLPAFSILLIDYACPVHSCPILYKAHYLFAVSTLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLLAGVAFVANTLLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 TVLPLYAKHYVLCVVTIPSIILLAVVALVVRIYCVVRSSHADMAAPOTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-731-030A-19

Sequence 19, Application US/09731030A

Patent No. 6566096

GENERAL INCORMATION:
APPLICANT: MUNROE, Donald G

APPLICANT: GUPTA, ABIWANI K.
TAPPLICANT: ZASTAWNY, ROMAN L.
TITLE OF INVENTION: MARWALIAN EDG-7 RECEPTOR HOWOLOGS
FILE REFERENCE: 8074-0015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 1809; DB 2; Best Local Similarity 100.0%; Pred. No. 8.7e-146; Matches 353; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: human EDG-4 #36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-582-200A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Application US/09582200A

Patent No. 6482609
GENERAL INFORMATION:
APPLICANT: Munroe, Donald G.
APPLICANT: Ramboj, Rajender
APPLICANT: Recenses, Dana A
APPLICANT: Peters, Dana A
APPLICANT: OF LOSOTAL ABOUT A GENERAL INVOLVED IN INFLAMMATION:
APPLICANT: Uyas, Tejal B.
APPLICANT: Uyas, Tejal B.
APPLICANT: Uyas, Tejal B.
APPLICANT: Uyas, Tejal B.
APPLICANT: Uyas, Soonesh, Fatemeh
APPLICANT: Uyas, Tejal B.
FILE REFERENCE: 108074-00002
CURRENT FILING DATE: 2000-07-28
FRIOR APPLICATION NUMBER: 09/222,995
FRIOR APPLICATION NUMBER: 60/109,885
FRIOR FILING DATE: 1998-11-25
FRIOR FILING DATE: 1998-11-25
FRIOR FILING DATE: 1998-4-03
FRIOR FILING DATE: 1998-4-03
FRIOR FILING DATE: 1998-11-26
FRIOR FILING DATE: 1998-4-03
FRIOR FILING DATE: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                    241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTINSLINPVIYTWRSRDLRREVL 300
                                                                                                                          VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVLPLYAKHYVLCVVTI FSI ILLAVVALYVRI YCVVRSSHADMAAPQTLALLKTVTI VLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 RPLOCWRPGVGVGVRRGGTPGHHLLPLRSSSSLERGMAMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                           301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                         RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 1809; DB 2; Length 353; Best Local Similarity 100.0%; Pred. No. 8.7e-146; Matches 353; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            j TYPE: PRT
j ORGANISM: Homo sapiens
US-09-582-200A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -09-582-200A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                              181
                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
```

유 ò g δ g ઠે g ò ద δ

```
JOSTON OF THE WORKERS OF THE WORKERS OF THE WORKER OF THE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NSKPHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                       Length 353;
                                                                                                                                                                                                                                                                   Indela
                            FEATURE:
NAME/KEY: misc feature
LOCATION: (273)..(273)
CTHER INPORMATION: Unknown Xaa refers to any amino acid
US-09-582-200A-2
                                                                                                                                                                                                       Query Match 99.7%; Score 1803; DB 2;
Best Local Similarity 99.4%; Pred. No. 2.8e-145;
Matches 351; Conservative 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: (272)...(274)
OTHER INFORMATION: Unknown Xaa
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
US-09-582-200A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Application US/09582200A

Sequence 2, Application US/09582200A

Sequence 2, Application US/09582200A

Setent No. 6482609

GENERAL INFORMATION:

APPLICANT: Munroc. Donald G.

APPLICANT: Koobesh, Fatemeh

APPLICANT: Koobesh, Fatemeh

APPLICANT: Woss, Tejal B.

PRICA PLING DATE: 109074-00002

CURRENT APPLICATION NUMBER: US/09/582,200A

CURRENT APPLICATION NUMBER: E0/109,885

PRIOR FILING DATE: 1998-12-30

PRIOR PILING DATE: 1998-04-03

PRIOR PILING DATE: 1998-12-30

NUMBER OF SEQ ID NOS: 14

SOFTWARE: PATENTIN VERSION 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTIRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Unknown Organism: Mammalian EDG
US-09-731-030A-19
                                                                                                                                                                                                                                                                                                                                                                                                                              Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 1809; DB 2; Best Local Similarity 100.0%; Pred. No. 8.7e-146; Matches 353; Conservative 0; Mismatches 0;
CURRENT APPLICATION NUMBER: US/09/731,030A
                         CURRENT FILING DATE: 1998-12-29
PRIOR APPLICATION NUMBER: 60/070,184
PRIOR FILING DATE: 1997-12-30
NUMBER OF SEQ ID NOS: 2.0
SEQ ID NO 19
LENGTH: 353
TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-582-200A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                            FEATURE:
```

셤

ò

g

ઠ

셤

ઠે

ઠે

ద

셤 ò 셤

ઠે

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                           61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                          121 FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 VFIVCWLPAFSILLIDYACPVHSCPILYXAHYXFAVSTLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/09274752D
; Sequence 3, Application US/09274752D
; Patent No. 6812335
; GENERAL INFORMATION:
; APPLICANT: An Gongalu
; TITLE OF INVENTION: Human Polypeptide Receptors for Lysophospholipids and
; TITLE OF INVENTION: Sphingolipids and Nucleic Acids Encoding the Same
; FILE REFREENCE: A-67501/DJB/TAL
; CURRENT APPLICATION NUMBER: US/09/274,752D
; CURRENT FILING DATE: 1999-03-23
; NUMBER OF SEQ ID NOS: 29
; SEQ ID NO 3
; SEQ ID NO 3
; LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                             NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                             9
                                                                                     9
                                                          1 MGSLYSEYINPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                              121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                          181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                             MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97.3%; Score 1760; DB 2;
98.0%; Pred. No. 1.3e-141;
tive 1; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens
US-09-274-752D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-274-752D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 346;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                         g
                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                             à
                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10, Application US/09582200A

Batent No. 6482609

GENERAL INFORMATION:

APPLICANT: Munroe, Donald G.

APPLICANT: Kamboj, Rajender

APPLICANT: Rocoshesh, Fateneh

APPLICANT: Vasa. Tejal B.

APPLICANT: Vasa. Tejal B.

APPLICANT: Vasa. Ashwani

TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE

FILE REPERENCE: 108074-00002

CURRENT APPLICATION NUMBER: US/09/582,200A

FILE REPERENCE: 108074-00002

CURRENT APPLICATION NUMBER: OF/CA98/01195

FRIOR FILING DATE: 1998-12-30

FRIOR PRILING DATE: 1998-12-30

FRIOR APPLICATION NUMBER: 60/10,885

FRIOR PLILING DATE: 1998-11-25

FRIOR PLILING DATE: 1998-04-03

FRIOR FILING DATE: 1998-04-03

FRIOR FILING DATE: 1998-04-03

FRIOR FILING DATE: 1998-04-03

FRIOR FILING DATE: 1999-11-23

NUMBER OF SEQ ID NOS: 14

SEQ ID NO 10

LENGTH DATE: PARLET DATE: 1999-11-230

NUMBER OF SEQ ID NOS: 14

SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                   NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                             ö
                                                                                                                  Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1803; DB 2; Pred. No. 2.8e-145; Pred. No. 1.8e-145; Pred. No. 2.8e-145; Pred. No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 99.7%; Score 1803; DB 2;
Best Local Similarity 99.4%; Pred. No. 2.8e-145;
Matches 351; Conservative 1; Mismatches 1;
i LOCATION: (273)..(273)

j OTHER INFORMATION: Unknown Xaa = Leu or Pro
US-09-582-200A-5
                                                                                                                                                                        1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: human EDG-4 polypeptide
                                                                                                                Query Match
Best Local Similarity 99.4%;
Matches 351; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-09-582-200A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFFRAFATLNSLLNPVIYTWRSKDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

89.9%; Score 1625.5; DB 1; Length 352;
Best Local Similarity 89.5%; Pred. No. 3.3e-130;
Matches 316; Conservative 14; Mismatches 22; Indels 1;
                                         US-US-195-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-998-0-15-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 352 amino acids TYPE: amino acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
RESULT 9
US-08-196-989B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-196-989B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYPFAFATLNSLLNPVIYTWRSRDLRRBVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RPLOCWRPGVGGRRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match

89.9%; Score 1625.5; DB 1; Length
Best Local Similarity 89.5%; Pred. No. 3.3e-130;
Matches 316; Conservative 14; Mismatches 22; Indels
Sequence 2, Application US/08760936

Patent No. 5856443

GENERAL INFORMATION:
APPLICANT: MacLennan, A. John
TITLE OF INVENTION: Molecular Cloning and Expression of
TITLE OF INVENTION: G-Protein Coupled Receptors
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Saliwanchik, Lloyd & Saliwanchik
STREET: 2421 N.W. 418t Street, Suite A-1
                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,936
FILING DATE: December 6, 1996
CLASSIFICATION: 5.36
ATTORNEY/AGENT INFORMATION:
NAME: Pace, Doran R.
REGISTRATION NUMBER: MAC-100C1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
US-09-582-200A-11
; Sequence 11, Application US/09582200A
; Patent No. 6482609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 352-375-8100
TELEFAX: 352-372-5800
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 352 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                     ZIP: 32606
                                                                                                                                                                                                                                                                                    STATE: FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
```

9

240

```
181 TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIICWLPAFSILLLDSTCPVRACPVLYXAHYFFAFATLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 RPLLCWRQGKGATG-RRGGNPGHRLLPLRSSSSLERGLHMPTSPTFLEGNTVV 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                           DB 2; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-225-024-2

| Sequence 2. Application US/09225024
| Patent No. 6518414
| Patent No. 6518414
| GENERAL INFORMATION:
| APPLICANT: MacLennan, A. John
| TITLE OF INVENTION: Molecular Cloning and Expression of TITLE OF INVENTION: G-Protein Coupled Receptors
| NUMBER OF SEQUENCES: 16
| CORRESPONDENCE ADDRESS: 16 | CORRESPONDENCE ADDRESS: 16 | CORRESPONDENCE ADDRESS: 16 | CORRESPONDENCE ADDRESS: 17 | CORRESPONDENCE ADDRESS: 17 | CORRESPONDENCE ADDRESS: 18 | CORRESPONDENCE ADDRE
                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: ABTENTIN BATEN:
SOFTWARE: PAPLICATION DATA:
APPLICATION NUMBER: US/09/225,024
FILING DATE: 04-JAN-1999
CLASSIFICATION NUMBER: 08/760,936
FILING APPLICATION NUMBER: 08/760,936
FILING DATE: 6-DEC-1996
PRIOR APPLICATION NUMBER: 08/196,989
FILING DATE: 15-FEB-1994
ATTORNEY/AGENT INFORMATION:
NAME: Pace, DOTAN R.
REGISTRATION NUMBER: MAC-100C1
TELECOMMUNICATION NUMBER: MAC-100C1
TELECOMMUNICATION NUMBER: MAC-100C1
TELECOMMUNICATION NUMBER: MAC-100C1
                                                                                                                                                                                                                                                                                                                                                                   22;
                                                                                                                                                                                                                                                                      Query Match 89.9%; Score 1625.5; DB 2
Best Local Similarity 89.5%; Pred. No. 3.3e-130;
Matches 316; Conservative 14; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Saliwanchik, Lloyd & Saliwanchik
STREET: 2421 N.W. 41st Street, Sulte A-1
CITY: Gainesville
STATE: FL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 352-372-5800
; SEQ ID NO 24
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Rattus SP.
US-09-169-205D-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                           APPLICANT: FULLOCAN: Contact of APPLICANT: FULLOCAN: Rajender APPLICANT: Mamboj, Rajender APPLICANT: Reamboj, Rajender APPLICANT: Recember APPLICANT: Robesh, Fatemenh APPLICANT: Robesh, Fatemenh APPLICANT: Mosses, Tejal B. APPLICANT: Gupta, Ashwani i TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY REFILE REFERENCE: 108074-00002
CURRENT FILING DATE: 108074-00002
CURRENT APPLICATION NUMBER: 00/222,995
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR PRILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                     RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFFAFATLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FSLIAIAIERQVAIAKVKLYGSDKSCRMLMLIGASWLISLILGGLPILGWNCLDHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 24, Application US/09169205D
Patent No. 648592
GREEAL INFORMATION:
APPLICANT: Erikeon, James
APPLICANT: Kiefer, Michael
APPLICANT: Kiefer, Michael
APPLICANT: Kiefer, Michael
TITLE OF INVENTION: METHODS FOR DETECTING COMPOUNDS WHICH MODULATE THE TITLE OF INVENTION: ACTIVITY OF AN LPA RECEPTOR
FILE REFERENCE: 252/004
CURRENT APPLICATION NUMBER: US/09/169,205D
CURRENT FILING DATE: 1998-10-09
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 89.9%; Score 1625.5; DB 2; Length 352; Best Local Similarity 89.5%; Pred. No. 3.3e-130; Matches 316; Conservative 14; Mismatches 22; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: rat EDG-4 polypeptide
US-09-582-200A-11
                                                  APPLICANT: Munroe, Donald G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-09-169-205D-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
```

요 8 g ð 셤 ò 셤 ò 셤 ò 셤

ઠે

셤

ò

셤

셤

ઠે

g

ઠે

ద

ઠે

ሯ

```
SLIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                               VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS------SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LIKTVIIVLGVPIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14 SSVSDYVNYDIIVRHYNYTGKLNISADKENSIKLTSVVFILICCFIILENIFVLLTIWKT 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                         SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
Gaps
12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
46.8%; Score 847; DB 1; Length 38
Best Local Similarity 48.4%; Pred. No. 4.7e-64;
Matches 167; Conservative 61; Mismatches 103; Indels
84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:

APPLICANT: MacLennan, A. John
APPLICANT: MacLennan, A. John
TITLE OF INVENTION: Molecular Cloning and Expression of
TITLE OF INVENTION: G-Protein Coupled Receptors
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Saliwanchik & Saliwanchik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: RIOPY disk
COMPUTER: IBM PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/196,989B
FILING DATE: 15-FEB-1994
CLASSIFICATION: S36
ATTORNEY/AGENT INFORMATION:
NAME: Lloyd, Jeff
REGISTRATION NUMBER: MAC-100
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Saliwanchik & Saliwanchik
STREET: 2421 N.W. 41st Street, Suite A-1
CITY: Gainesville
60; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Application US/08196989B Patent No. 5585476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314 TNKEMRRAFIRIMSC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291 RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 383 amino acids
TYPE: amino acid
159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 904-372-5800
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
US-08-196-989B-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-196-989B-4
                                                                                                                                                                                                                                                                                                122
                                                           m
                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              231
   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                              ð
                                                                                                             셤
                                                                                                                                                                               ઠે
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: George Livi
APPLICANT: Derk Bergsma
APPLICANT: Derk Bergsma
APPLICANT: Derk Bergsma
APPLICANT: Derk Bergsma
APPLICANT: Stadel
APPLICANT: Stadel
APPLICANT: Shalagh Wilson
APPLICANT: Randall Johnson
APPLICANT: Shalagh Wilson
APPLICANT: Shalagh Wilson
APPLICANT: Phillipe Robert
APPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFPAFATLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFARBGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLISGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                  ä
                                                                                                                                                                                                                                                                       DB 2; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 849; DB 2; Length 382; Pred. No. 3.2e-64;
                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                    Query Match 89.9%; Score 1625.5; DB 2; Best Local Similarity 89.5%; Pred. No. 3.3e-130; Matches 316; Conservative 14; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/09262477A Patent No. 6423508 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46.9%;
                                                              352 amino acids
   INFORMATION FOR SEQ ID NO:
                               SEQUENCE CHARACTERISTICS
                                                                                                                       single
                                                                                                                                                                               MOLECULE TYPE: peptide
                                                              LENGTH: 352 amino
TYPE: amino acid
STRANDEDNESS: sing
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-262-477-2
                                                                                                                                                                                                           US-09-225-024-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
```

15 SQVSDYGNYDIIVRHYNYTGKLNIGVEKDHGIKLTSVVFILICCLIILENIFVLLTIWKT 74

Search completed: December 4, 2005, 06:24:24 Job time : 34.5 secs

Sequence 402, App Sequence 950, App Sequence 950, App Sequence 116, App Sequence 2566, Ap Sequence 444, App Sequence 52, Appl Sequence 374, App Sequence 378, App

Sequence 3 Sequence 7 Sequence 4

115, App 68, Appl 199, App 8, Appli

Sequence 1 Sequence 1 Sequence 2 Sequence 6 Sequence 6 Sequence 1

Perfect score:

Sequence:

OM protein

Scoring table:

Searched:

Minimum DB Maximum DB

Database

Result Š.

```
GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Miller, Duane D.

APPLICANT: Tigyi, Gabor

APPLICANT: Dalcon, James T.

APPLICANT: Sardar, Vineet M.

APPLICANT: Sardar, Vineet M.

APPLICANT: Sardar, Vineet M.

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Tamas

APPLICANT: Wang, Tamas

APPLICANT: Wang, Tamas

APPLICANT: Virag, Tamas

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Sarding

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Dean

APPLICANT: Wang, Darie 2005-02-28

FILE REFERENCE: 20609/305

CURRENT APPLICATION NUMBER: 60/190,370

PRIOR PILING DATE: 2000-03-17

PRIOR PILING DATE: 2001-03-19

PRIOR FILING DATE: 2001-03-19

NUMBER OF SEQ ID NOS: 26

SEQ ID NO 2

LENGTH: 364

MANGER: PATENTING VET: 2.1

SEQ ID NO 2

LENGTH: 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34 YNRSGKHLATEWNTVSKLVMGLGITVCIFIMLANLLVMVAIXVNRRFHFPIYXLMANLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28.0%; Score 506; DB 7; Length 364; 34.6%; Pred. No. 4.8e-36; ative 69; Mismatches 122; Indels 30;
US-10-980-388-119
US-10-980-388-110
US-10-980-388-100
US-10-980-388-68
US-11-0858-730-199
US-11-099-691-8
US-11-099-691-8
US-11-099-691-8
US-10-980-388-63
US-10-980-388-116
US-11-082-389-374
US-11-082-389-378
US-11-082-389-378
US-11-082-389-4126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/11067884 publication No. US20050261252A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 34.61
Matches 117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , ORGANISM: Homo sapiens
US-11-067-884-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-11-067-884-2
                                                                                                               92.5
                                                                                                                                                    89.5
87.5
86.5
86.5
86.5
86.5
                                                                                                                                                                                                                                                                                                                                                              84.5
83.5
83.5
83.5
82.5
        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     118, App
8, Appli
112, App
2, Appli
934, App
2, Appli
4, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8, Appli
2, Appli
6, Appli
2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117, App
6, Appli
                                                                                                                                                                                                 4, 2005, 06:23:26; Search time 6 Seconds
(without alignments)
281.714 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Apsequence 6, Apsequence 26, Apsequence
                                                                                                                                                                                                                                                                                                             US-10-084-507B-22
1809
1 MGSLYSEYINPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8,
Sequence 2,
Sequence 6,
Sequence 6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Published Applications AA_New:*

1: /cgn2_6/ptodata//pubpaa/US09_NEW_PUB.pep:*
2: /cgn2_6/ptodata//pubpaa/US06_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/NEW_PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
                                       GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-11-067-884-4

US-11-067-884-6

US-10-851-667A-26

US-10-992-577-8

US-10-992-577-6

US-10-992-577-6

US-10-992-577-44

US-10-992-577-44

US-10-980-388-112

US-10-980-388-112

US-10-980-388-112

US-10-861-388-112

US-10-861-388-112

US-10-861-388-112

US-10-861-388-117

US-10-861-388-117

US-10-861-388-117

US-10-861-388-117

US-10-861-388-117

US-10-627-633-6

US-10-627-633-6

US-11-068-686-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26661 segs, 4788334 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                 - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match Length
                                                                 Copyright
                                                                                                                                                                                                       December
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 2 9 7 8
```

78 SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKV 137

6

Gaps

KLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTI 197

-: -: -:

138

ਨੇ 셤

Sequence Sequence Sequence Sequence Sequence

485 481.5 286.5 286.5 286.5 2005.5 2005.5 2005.5 184 184 184 184 186.5 126.5 1

US-11-068-686-4 US-10-502-145-1 US-10-131-826A-18

ò 유 ò g ò 셤

```
LPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQT-----LALL 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63 KFHSAMYLFLGNLAASDLLAGVAFVANTLLLSGSVTLRLTPVQWFAREGSAFITLSASVFS 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60 KFHFPFYYLLANLAAADFFAGIAYVFLMFNTGPVSKTLTVNRWFLRQGLLDSSLTASLTN 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTV 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            233 KTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRS 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Million, Karoly
APPLICANT: Fischer, David J.
APPLICANT: Viracy
APPLICANT: Viracy
APPLICANT: Viracy
APPLICANT: Viracy
APPLICANT: Viracs
APPLICANT: Norser, Norser
TITLE OF INVENTION: LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF
TITLE OF INVENTION: USE
FILE REPRESENCE: 20609/302
CURRENT APPLICATION NUMBER: US/11/067,884
CURRENT FILING DATE: 2005-02-28
PRIOR FILING DATE: 2005-03-17
PRIOR PLICATION NUMBER: 09/190,370
PRIOR PLICATION NUMBER: 09/190,370
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2001-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 LNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCA-----IVVENLLVLIAVARNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26.6%; Score 481.5; DB 7; 32.2%; Pred. No. 5.3e-34; tive 73; Mismatches 121;
                                    315 LRQSTRESVHYTSSAQGGASTRIMLP 340
    306 ----WRPGVGVQGRRRGGTPGHHLLP 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4
US-10-851-667A-26
IS-10-851-667A-26
Publication US/10851667A
Publication No. US20050260608A1
GENERAL INFORMATION:
                                                                                                                                                                    Sequence 6, Application US/11067884
Publication No. US20050261252A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            293 RDLRREVLRPLQCW 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          298 EDMYGTMKKMICCF 311
                                                                                                                                                                                                                                                                                                                                      Elrod, Don B.
Xu, Huiping
Baker, Daniel L.
Wang, Dean
                                                                                                                                                                                                                                                                  Tigyi, Gabor
Dalton, James T.
Sardar, Vineet M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 353
                                                                                                                                                                                                                                         APPLICANT: Miller, Duane D. APPLICANT: Tigyi, Gabor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 101; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-067-884-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183
                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                              198 FSIILLAV-VALYVRIYCVVR-----SSHADMAAPQ-----TLALLKTVTIVLGVFIVC 245
                                                                              246 WLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                         271 WIPGLVLLLDVCCP--QCDVLAYEKFFLLLAEFNSAMNPIIYSYRDKEMSATFRQILCC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             154 QLHTRMSNRRVVVVIVVIWTMAIVMGAIPSVGWNCICDIENCSNMAPLYSDSY-LVFWAI 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKV 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTI 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SLLVFLLMVAVYTRIFFYVRRVQRMAEHVSCHPRYRETTLSLVKTVVIILGAFVVCWTP 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   249 AFSILLLD-YACPVHSCPILYXAHYLFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC-- 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Lillom, Karoly
APPLICANT: Fischer, David J.
APPLICANT: Virag, Tama
APPLICANT: Nusser, Nora
APPLICANT: Nusser, Nora
TITLE OF INVENTION: LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF TITLE OF INVENTION: USE
FILE REFERENCE: 20609/105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FSIILLAVVALYVRIYCVVRSSHADMA-----APQTLALLKTVTIVLGVFIVCWLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 26.8%; Score 485; DB 7; Length 351; Best Local Similarity 35.9%; Pred. No. 2.7e-34; Matches 117; Conservative 57; Mismatches 134; Indels 18;
                                                                                                                                                                                                                                      306 WRPGVGCRRRGGTPGHHLLPLRSSSSLER----GMH 339
                                                                                                                                                                                                                                                                                     QR----SENPTGPTESSD----RSASSLNHTILAGVH 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/11/067,884
CURRENT FILING DATE: 2005-02-28
PRIOR APPLICATION NUMBER: 60/190,370
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4, Application US/11067884
Publication No. US20050261252A1
GENERAL INFORMATION:
APPLICANT: Miller, Duane D.
APPLICANT: Dalton, James T.
APPLICANT: Balton, James T.
APPLICANT: Sardar, Vineet M.
APPLICANT: Birod, Don B.
APPLICANT: Baker, Don B.
APPLICANT: Baker, Daniel L.
APPLICANT: Wang, Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-11-067-884-4
                                                                                                                                                                                                                                                                                                                                                                                   US-11-067-884-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    197
```

ઠે 셤 ò 임 ò 엄 ò g ò Gaps

```
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Jones, Kenneth A.
APPLICANT: Jones, Kenneth A.
APPLICANT: Bornith, James A.
APPLICANT: Bornith, Jones A.
APPLICANT: Bornith, Jones A.
APPLICANT: Bornith, Jones A.
APPLICANT: Craig, Douglas A.
TITLE OF INVENTION: DAM Enceding Mammalian Neuropeptide FF (NPFF) Receptors
TITLE OF INVENTION: DAM Enceding Mammalian Neuropeptide FF (NPFF) Receptors
TITLE OF INVENTION: DAM Enceding Mammalian Neuropeptide FF (NPFF) REPERENCE: 57155-D/JPW
CURRENT APPLICATION NUMBER: US/09/538,036
FRIOR FILING DATE: 1090-03-29
FRIOR FILING DATE: 1990-09-24
FRIOR FILING DATE: 1990-02-22
FRIOR APPLICATION NUMBER: 09/255,368
FRIOR FILING DATE: 1990-09-25
FRIOR PELING DATE: 1990-03-25
FRIOR PELING DATE: 1990-03-25
FRIOR FILING DATE: 1990-03-25
FRIOR PELING DATE: 1990-03-25
FRIOR PERING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SRRRARVVHMLVMVALFFTLSWIDPLWALLILIDYGQLSAPQLHLVTVYAFPF---AHWL- 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48 VAYALIFLIC---MYGNTLVCFIVLKORRHMHTVTNMFILNLAVSDLLVGIFCMPTTLVDN 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95 SVTLRLTPVQWFAREGSAF-----HVAIAK 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137 VKLYGSDKSCRMLLLIGASWLISLVL---GGLPILGWNCLGH--LEACSTVLPLYAKHYV 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           192 LC------SSHADMAA 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       226 PQTLALLKTVTIVLGVFI-VCWLPAFSILLL-DYA------CPVHSCPILYKAHYLF 274
                                                                                                                                                                                                                                                                                                                                                                                                                                            35 VASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            376 VRPSDSGLPSESGPSSGAPRPGRLPLRNGRVAHHGLPREGPGCSHLPLTIPAW 428
                                                                                                                                                                                                                                                                                                                                                                                 Indels 133;
                                                                                                                                                                                                                                                                                                                         Length 430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 309 -----GVGVQGRRRGGTPGHHLLPLRSSSSLERGM----
                                                                                                                                                                                                                                                                                                                      Query Match 12.5%; Score 226.5; DB 6; Best Local Similarity 24.7%; Pred. No. 1.8e-12; Matches 102; Conservative 58; Mismatches 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        275 AVSTLNSLLNPVIYTWRSRDLRR---EVLRPLOCWRP-
PRIOR APPLICATION NUMBER: 09/161,113
PRIOR FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 71
SOFFWARE: Patentin Ver. 2.1
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/10992577 Publication No. US20050260687A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Rattus norvegicus
                                                                                                                                                                                             TYPE: PRT
CORGANISM: Homo sapiens
US-10-992-577-8
                                                                                                                                                                LENGTH: 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262
                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                               APPLICANT: Shohami, Esther
APPLICANT: Shohami, Esther
APPLICANT: Mechoulam, Raphael
TITLE OF INVENTION: METHODS, KITS AND PHARMACEUTICAL COMPOSITIONS FOR DIAGNOSING,
TITLE OF INVENTION: DELAYING ONSET OF, PREVENTING AND/OR TREATING OSTEOPOROSIS
FILE REFERENCE: 28030
CURRENT APPLICATION NUMBER: US/10/851,667A
CURRENT PILLING DATE: 2004-05-24
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
LENGTH: 360
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/10992577

Publication No. US20050260687A1

GENERAL INFORMATION:
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Jones, Kenneth A.
APPLICANT: Borowsky, Beth E.
APPLICANT: Craig, Douglas A.
APPLICANT: Craig, Douglas A.
TITLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors
TITLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors
FILE REFERENCE: 57155-D/JVW
CURRENT APPLICATION NUMBER: US/10/992,577
CURRENT APPLICATION NUMBER: US/09/538,036
PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 1999-09-24

PRIOR FILING DATE: 1999-09-24

PRIOR FILING DATE: 1999-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            175 CP--RPCSELFPLIPNDYLLSWLLFIAFLFSGIIYTYGHVLWKAHQHVASLSGHQDRQVP 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233 GMARWRLDVRLAKTLGLVLAVLLICWFPVLALMAHSLATTLSD---QVKKAFAFCSMLCL 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65 HSAMYLFLGNLAASDLLAGVAF-----VANTLLSGSVTLRLTPVQWFAREGSAFITL 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117 SASVFSLLAIAIARHVAIAKVKLYGSDKSC----RMLLLIGASWLISLVLGGLPILGWNC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173 LGHLEACSTVLPLYAKHYVLCVVTIFSIILLAVVALYVRI-----YCVVRSSHADMAAP 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 227 -----QTLALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFA--VST 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 VTEIANGSKDGLDSNPMKDYMILSGPQKTAVAVLCTLLGLLSALENVAVLYLILSSHKLR 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 VQEHYNYTXETLETQETTSRQVAS----AFIVILCCAI----VVENLLVL-IAVARNSKF 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15.7%; Score 284; DB 6; Length 360;
25.9%; Pred. No. 2.2e-17;
tive 65; Mismatches 133; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc feature
LOCATION: (63) ... (63)
OTHER INFORMATION: Non-synonymous polymorphism: Gln or Arg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :||::||||| || ::|
290 INSMVNPVIYALRSGEIRSSAHHCLAHWKKCVRGLGSEAK 329
                                                                    de Vernejoul, Marie-Christine
Bab, Itai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 25.9
Matches 88; Conservative
                Zimmer, Andreas
                                             Karsak, Meliha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-851-667A-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-992-577-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 279
                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
10 NPNKVQEH-----YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173 LGHLEACSTVLPLYAKHYV------
                                                                                                                                                                                                                                     173 LGHLEACSTVLPLYAKHYV-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn version 3.3
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens
US-10-510-018-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                         ð
                                                                                                            g
                                                                                                                                                                                        g
                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                            셤
                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/10992577
Publication No. US20050260687A1
| Publication No. US20050260687A1
| GENERAL INFORMATION:
| APPLICANT: Gerald, Christophe P.G.
| APPLICANT: Jones, Kenneth A.
| APPLICANT: Bonini, James A.
| APPLICANT: Graig, Douglas A.
| APPLICANT: Craig, Douglas A.
| TITLE OF INVENTION: And Uses Thereof
| TILLE OF INVENTION: And Uses Thereof
| TILLE OF INVENTION: And Uses Thereof
| FILE REFERENCE: 57155-D/JVPW
| CURRENT APPLICATION NUMBER: US/10/992,577
| CURRENT FILING DATE: 2000-03-29
| PRIOR APPLICATION NUMBER: US/9405,588
| PRIOR FILING DATE: 1999-09-24
| PRIOR PRILING DATE: 1999-02-22
| PRIOR FILING DATE: 1999-02-22
| PRIOR FILING DATE: 1998-09-25
| NUMBER OF SEQ ID NOS: 71
| SOSTWARES PATENTIN VOR: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14;
                                                           19;
                                                                                                                                                                                                SDLLVGIFCMPTILVDNLIT------GWPFDNATCKMSGLVQGMSVSASVFILV 135
                                                                                                                                                                                                                                                        125 AIAIER-----HVAIAKVKLYGSDKSCRMLLLIGASWLISLVL---GGLPILGWNCLGH- 175
                                                                                                                                                                                                                                                                                                                                                                                                                                          250 ARDTEEAVAEGGRISRRRARVVHMLVMVAL---FFILSWLPLWVLLLLIDYGELSELQLH 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    307 LLSVYAFPL---AHWL---AFFHSSANPIIYGYFNENFRRGFQAAFRAQLCWPPWAAHKQ 360
                                                                                                                                                                          78 SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAF------ITLSASVFSLL 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259 -CPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRR---EVLRPLQCWRP----- 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------GVGVQGRRRGGTPGHHLLPLRSSSSLERG----- 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361 AYSERPNRLLRRRVVVDVQPSDSGLPSESGPSSGVPGPGRLPLRNGRVAHQDGPGEGPGC 420
                                                                                                                    28 TSLIFSSYYQHSSPVAAMFIAAYVLIFILCMVGNTLVCFIVLKNRHMRTVTNMFILNLAV 87
                                                                                                                                                                                                                                                                              Gaps
                                                                                              21 TKETLETQETTSRQVASAFI --- VILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA
                                                                                                                                                                                                                                                                                                                                                                                                               213 ----YCVVRSSHADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLL-DYA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                Query Match
11.9%; Score 215.5; DB 6; Length 432;
Best Local Similarity 23.7%; Pred. No. 1.6e-11;
Matches 102; Conservative 57; Mismatches 140; Indels 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95,
                                                                                                                                                                                                                                                                                                                               -----KHYVLCVVT-IFSIILLAVVALYVRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 11.4%; Score 205.5; DB 6; Best Local Similarity 23.2%; Pred. No. 1e-10; Matches 82; Conservative 69; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                  176 -LEACSTVLPLYA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421 NHMPLTIPAW 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       338 MHMP-TSPTF 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-992-577-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-992-577-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309
                                                                                                                                   셤
                                                                                                                                                                          ò
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
Sequence 2, Application US/10510018
| Publication No. US20050244896A1
| Publication No. US20050244896A1
| Publication No. US20050244896A1
| APPLICANT: Bruggemeier, Ulf
| APPLICANT: Bruggemeier, Ulf
| APPLICANT: Bruggemeier, Ulf
| APPLICANT: Welngarten, Bernhard
| TITLE OF INVENTION: Discoperide FF Receptor 2 (NPFF2)
| TITLE OF INVENTION: Neuropeptide FF Receptor 2 (NPFF2)
| TITLE OF INVENTION: Neuropeptide FF Receptor 2 (NPFF2)
| TITLE OF INVENTION: Neuropeptide FF Receptor 3 (NPFF2)
| TITLE OF INVENTION: Neuropeptide FF Receptor 3 (NPFF2)
| TITLE OF INVENTION NUMBER: PG7/EP2003/002962
| FRIOR FILING DATE: 2003-03-21
| FRIOR FILING DATE: 2003-04-10-1
| FRIOR FILING DATE: 2003-04-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14;
                                                                                                                                 64 FHSAMYLFLGNLAASDLLAGVAFVANTLLS------GSVTLRLTPVQWFAREGSAFIT 115
                                                                                                                                                                                                                                                            116 LSASVFSLLAIAIERHVAIA---KVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNC 172
                                                                                                                                                                                                                                                                                                  ----LCVVTIFSIILLAV 205
                                                                                                                                                                                                                                                                                                                                                                                                                                       206 VALYVRIYCVVRSSHADMAAPQT------LALLKTVTIVLGVFIVCWLPAF 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   116 LSASVFSLLAIALARATA---KVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----LCVVTIFSIILLAV 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       277 ---MSPSAVMLHVQEEKYYRVRLNSQNKTSPVYWCREDWPNQEMRKIYTTVLFANIYLAP 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206 VALYVRIYCVVRSSHADMAAPQT-----LALLKTVTIVLGVFIVCWLPAF 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334 LSLIVIMYGRIGISLFRAAVPHTGRKNQEQWHVVSRKKQKIIKMLLIVALLFILSWLPLW 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      232 LSLIVIMYGRIGISLFRAAVPHTGRKNQEQWHVVSRKKQKIIKMLLIVALLFILSWLPLW 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120 NVNDTKHHLYSDINITYVNYYLHQPQVAAIFIISYFLIFFLC--MMGNTVVCFIVMRNKH 177
                                                                75
63
                                        18 NVNDTKHLYSDINITYVNYYLHQPQVAAIFIISYFLIFFLC--MAGNTVVCFIVMRNKH
                                                                                                                                                                   64 FHSAMYLFLGNLAASDLLAGVAFVANTLLS-----GSVTLRLTPVQWFAREGSAFIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 NPNKVQEH-----YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292 TLMMLSDYADLSPNELQIINIXIYPFAHWL---AFGNSSVNPIIYGFFNENFRR 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              251 SILLL-DYA-----CPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRR 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 522;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 11.4%; Score 205.5; DB 6; Best Local Similarity 23.2%; Pred. No. 1.3e-10; Matches 82; Conservative 69; Mismatches 108;
```

```
RESULT 11
US-10-980-388-118
                                                                                                                                                                                                                                                                                                                                        LENGTH: 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                           APPLICANT: Jones, Kenneth A.

APPLICANT: Bonini, James A.

TITLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors

TITLE OF INVENTION: And Uses Thereof

FILE REFERENCE: 57155-D/JFW

CURRENT APPLICATION NUMBER: US/09/538,036

PRIOR FILING DATE: 1999-09-24

PRIOR FILING DATE: 1999-09-24

PRIOR FILING DATE: 1999-02-22

PRIOR FILING DATE: 1999-02-22

PRIOR FILING DATE: 1999-02-22

PRIOR FILING DATE: 1999-02-22

PRIOR FILING DATE: 1999-03-25

NUMBER OF SEQ ID NOS: 71

SOUTHWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             310 NIYVYPF---AHWL---AFCNSSVNPIIYGFFNENFRSGFQDAFQFCQKKVKKPQEAY--- 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194 LSSHNKTSTVYMCREDWPNQEMRRIYTTV-LFATIYLAPLSLIVIMYARIGASLFKTSAH 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253 STGKQRLEQWHVSKKKQKVIKMLLTVAL---LFILSWLPLWTLMMLSDYADLSPNKLRVI 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LLAGVAFVANTLLS-----GSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERH 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----REVLRPLQCWRPG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34 YMNYYLQPHVTAVFISSYFLIFFLC--MVGWTVVCFVVIRNRYMHTVTNFFIFNLAISD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        132 VAIA---KVKLYGSDKSCRMLLLIGASWLISLVLGGLPIL-----KVKLYGSDKSCRMLLLIGASWLISLVLGGLPIL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ------HADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLL-DYA-----C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 YTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         --GWNCLGHLEACSTVLPLYAKHYVLCVVTIPSIILLAVVALYVRIYCVVRSS----
297
                  394 TLMMLSDYADLSPNELQIINIYIYPFAHWL---AFGNSSVNPIIYGFFNENFRR 444
251 SILLL-DYA-----CPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 417;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11.2%; Score 202.5; DB 6; ilarity 22.6%; Pred. No. 1.9e-10; Conservative 73; Mismatches 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310 VGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTS 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLR-
                                                                                                                                   Sequence 44, Application US/10992577
Publication No. US/050505687A1
GENERAL INFORMATION:
APPLICANT: Gerald, Christophe P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
US-10-502-893-2
; Sequence 2, Application US/10502893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 89; Conserv
                                                                                              RESULT 9
US-10-992-577-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-992-577-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
ଚ
                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
Sequence 118, Application US/10980388
Publication No. US20050255490A1
GENERAL INFORMATION:
APPLICANT: Parodi, Luis A.
APPLICANT: Habsch, Ronald R.
APPLICANT: Lind, Peter
APPLICANT: Raytes, Paul S.
APPLICANT: Raytes, Paul S.
APPLICANT: Huff, Rita M.
APPLICANT: Wood, Linda S.
TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related ApplicANT: CURRENT APPLICATION NUMBER: US/10/980,388
                                              APPLICANT: G51z, Stefan
APPLICANT: G51z, Stefan
APPLICANT: G51z, Stefan
APPLICANT: G51z, Stefan
APPLICANT: Geerts, Andreas
TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with a New
TITLE OF INVENTION: Human 5HT6 Receptor
FILE REFERENCE: LeA 35 827
CURRENT PLING DATE: 2004-07-27
PRIOR APPLICATION NUMBER: PCT/EP03/000479
PRIOR APPLICATION NUMBER: EP 02001942.8
PRIOR FILING DATE: 2002-02-01
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin version 3.2
SEQ ID 0.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83 AMINALYGRWYLARGLCLIMTAFD---VMCCSASILNLCLISLDRYLLILSPLRYKLRMT 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282 LINPVIYTWRSRDLRREVLRPLOCWR------PGVGVQGRRRGGTPGHHLLPLRSSS 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            146 -CRMLLLIGASWLISLVLGGLP-ILGWNCLGHLE----ACSTVLPLYAKHYVLCVVTI- 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----LK---TVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNS 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29 VAAALCVVIALTAAANSLLIALICTQPALRNTSNF-----FLVSLFTSDLMVGLVVMPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87 -VANTILISGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35 VASAFIVILCCAIVVENLLVLI----AVARNSKFHSAMYLFLGNLAASDLLAGVAF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              198 FSIILLAVVALYVRIYCVVRSSHADMA------APOTLAL------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 440;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        54; Mismatches 139; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10.9%; Score 198; DB 6; 25.0%; Pred. No. 4.7e-10;
No. US2005025529A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SLQQVLPLPLPP 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333 SLERGMHMPTSP 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-10-502-893-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
```

ω

```
FILE REFERENCE: 20609/305
CURRENT APPLICATION NUMBER: US/11/067,884
CURRENT FILING DATE: 2005-02-28
PRIOR PPLICATION NUMBER: 60/190,370
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/811,838
PRIOR FILING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 26
SOFWARE: PATENTIN VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 112, Application US/10980388
Publication No. US20050255490A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Vogeli, Gabriel
APPLICANT: Parcdi, Luis A.
APPLICANT: Hiebsch, Ronald R.
APPLICANT: Lind, Peter
APPLICANT: Kaytes, Paul S.
APPLICANT: Kuff, Valerie
APPLICANT: Ruff, Valerie
APPLICANT: Huff, Rita M.
APPLICANT: Wood, Linda S.
                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
US-11-067-884-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    339 H 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  415 H 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-980-388-112
                                                                                                                                                                                                                                       LENGTH: 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <del>a</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100 --GAKFCTLHSCCDVAFCYSSVLHLCFICIDRYIVVTDPLVYATKPTVSVSGICISVSWI 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 205 VVALYVRIYCVVR-------SHADMAAPQTLALLKTVTIVLGVFIVCWL 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48 VVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFA 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108 REGSAFITLS-----ASVFSILAIAIERHVAIAKVKLYGSDKSCRML-LLIGASWL 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       158 ISLVLGGLP------ILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLA 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              46 VFGNLLVMTSVLHFKQLHSPINFLIASLACADFLVGVTVMLFSM-----VRTVESCWYF 99
         PRIOR AFELLALIAN NUMBER: 06/184,305
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2000-02-23
PRIOR PELING DATE: 2000-02-23
PRIOR APPLICATION NUMBER: 60/184,305
PRIOR APPLICATION NUMBER: 60/184,303
PRIOR PLING DATE: 2000-02-23
PRIOR FILING DATE: 2000-02-23
PRIOR PLICATION NUMBER: 60/184,397
PRIOR PLICATION NUMBER: 60/184,297
PRIOR PLILING DATE: 2000-02-23
PRIOR PLILING DATE: 2000-02-23
PRIOR PLILING DATE: 2000-03-13
PRIOR PLILING DATE: 2000-03-13
PRIOR PLILING DATE: 2000-03-13
PRIOR PLILING DATE: 2000-07-11
PRIOR PLILING DATE: 2000-07-20
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 184
SOFTWARE: PATENTIN VEFSION 3.0
SEMPLING DATE: 2000-07-20
REMAINS PRIOR PLILING PRIOR SEQ ID NOS: 184
SOFTWARE: PATENTIN VEFSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lilion, Karoly
APPLICANT: Fischer, David J.
APPLICANT: Virag, Tamas
APPLICANT: Nusser, Nora
TITLE OF INVENTION: LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF
TITLE OF INVENTION: USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248 PAFSILLLD----YACPVHSCPI-LYKAHYLFAVSTLNSLLNPVIY 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 10.2%; Score 184; DB 6; Length 34; Best Local Similarity 22.4%; Pred. No. 5.4e-09; Matches 64; Conservative 53; Mismatches 103; Indels
  US/09/791,932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 8, Application US/11067884
Publication No. US20050261252A1
GENERAL INFORMATION:
APPLICANT: Miller, Duane D.
APPLICANT: Dalton, James T.
APPLICANT: Balton, James T.
APPLICANT: Bardar, Vineer M.
APPLICANT: Brod, Don B.
APPLICANT: Brod, Don B.
APPLICANT: W. Huiping
APPLICANT: Wang, Deaniel L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-980-388-118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
US-11-067-884-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
```

```
APPLICANT: Lind, Peter
APPLICANT: Kaytes, Paul S.
APPLICANT: Ruff, Valerie
APPLICANT: Raytes, Paul S.
APPLICANT: Ruff, Valerie
APPLICANT: Huff, Rita M.
APPLICANT: Wood, Linda S.
TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related Appl
FILE REFERENCE: 00325.USI
CURRENT APPLICATION NUMBER: US/10/980,388
CURRENT APPLICATION NUMBER: US/09/791,932
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2000-02-23
                                                                        17;
                                                                                                                                                                                                                                                                                                                                                       194
                                                                                                                                                                                 85 SAIMIFILFVSFIGNLVVCLMVYQKAAMRSAINILLASLAFADMLLAVINMPFALVTIL- 143
                                                                                                                                                                                                                                                                              147
                                                                                                                                                                                                                                                                                                                                                                                                                        148 MLLLIGASWLIS-----LVLGG----LPILGWNCL-GHLEACSTVLPLYAKHYVLCVVT 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       197 IFSIILLAVV-------ALYVRIY----CVVRSSHADMAAPQ-----T 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     250 SFFIPFLVILYSFMGILNTLRHNALRIHSYPEGICLSQASKLGLMSLQRPFQMSIDMGFK 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         282 LLNPVIYTWRSR---DLRREVLRPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGM 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365 ALNPLIYYWRIKKFHDACLDMMPKSFKFLPQL------PGHTKRRIRPSAVYVCGE 414
                                                                                                                                                                                                                                                                                                                          144 ---TTRWIFGKFFCRVSAMFFWLFVIEGVAILLIISIDRFLIIVQRQDKLNPY----R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  310 TRAFTIIILEAVFIVCWAP-FTTYSLVATFSKH----FYYQHNFFEISTWLLMLCYLKS
                                                                                                                                                                                                                                                                              94 GSVTLRLTPVQWFAREGSAFITLSA--SVFSLLAIAIERHVAIA----KVKLYGSDKSCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229 LALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVST-----LNS
                                                                                                                                            37 SAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGV---AFVANTLLS
                                                                        Gaps
                                                                        88;
Length 419
Query Match 10.2%; Score 184; DB 7; Length 41 Best Local Similarity 25.2%; Pred. No. 6.7e-09; Matches 91; Conservative 50; Mismatches 132; Indels
```

```
; Sequence 934, Application US/10821234; Publication No. US20050255114A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 22.7%;
Matches 64; Conservative 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
US-10-821-234-934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-821-234-934
                                                22
                                                                                                                                                                                                                                          145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Job time :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                             g
                                                                                                                                                                     ઠે
                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92 SV-----PLFWPLNSHFCTALVSLTHLFAFASVNTIVVVSVDRYLSIIHPLSYPSKMTQR 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95 SVTLRLTPVQWFAREG--SAFITLS----ASVFSLLAIAIERHVAIAKVKLYGSDKSCR 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    148 M-LLLIGASWLISLVLGGLPILGWNCLGHLE---ACSTVLPLYAKHYVLCVVTIFSIILL 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : | : | | :: | | | :: | | :: | 33 IRSTVLVIFILASFVGNIVLALVLQRKPQLLQVTNRFIFNLLVTDLLQ-ISLVAPWVVAT 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     35 VASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSG 94
PRIOR APPLICATION NUMBER: 60/184,397
PRIOR PILING DATE: 2000-02-23
PRIOR PILING DATE: 2000-02-23
PRIOR PLING DATE: 2000-02-23
PRIOR PILING DATE: 2000-02-23
PRIOR FILING DATE: 2000-02-31
PRIOR PLING DATE: 2000-03-13
PRIOR PLICATION NUMBER: 60/18,880
PRIOR PILING DATE: 2000-07-11
PRIOR PLICATION NUMBER: 60/217,369
PRIOR FILING DATE: 2000-07-11
PRIOR PLING DATE: 2000-07-11
PRIOR PLING DATE: 2000-07-20
PRIOR PRIOR PLING DATE: 2000-07-20
PRIOR PLING DATE: 2000-07-20
PRIOR PRIOR PLING DATE: 2000-07-20
PRIOR PLING DATE: 2000-07-20
PRIOR PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LPSOYLMELSEEHSWMSNQTDLHY-----VLKPGEVAT----ASIFFGILWLFSIFGNSLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 LYSEYL------NPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match
9.3%; Score 167.5; DB 6; Length 508;
Best Local Similarity 24.7%; Pred. No. 2e-07;
Matches 49; Conservative 48; Mismatches 84; Indels 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
7.9%; Score 143; DB 6; Length 415;
Best Local Similarity 24.2%; Pred. No. 1.9e-05;
Matches 86; Conservative 55; Mismatches 128; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/10627633

Publication No. US200502507201

GENERAL INFORMATION:
APPLICANT: Charles, Andrew David
APPLICANT: Brennand, John Charles
APPLICANT: Hart, Kevin Anthony
ITLE OF INVENTION: NOVel Compound
FILE REFERENCE: 1991-221
CURRENT FILING DATE: 2003-07-28
PRIOR APPLICATION NUMBER: 09/722,342
PRIOR APPLICATION NUMBER: 09/722,342
PRIOR APPLICATION NUMBER: 60/172,146
PRIOR APPLICATION NUMBER: 60/172,146
PRIOR APPLICATION NUMBER: 60/172,146
PRIOR SEQ ID NOS: 6
SOFTWARE: PALENTIN VETBION 3.2
SEQ ID NO 2.5
SEQ ID NO 2.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204 AVVALYVRIYCVVRSSHA 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    207 VMIACYSVVFCAARRQHA 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-980-388-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-10-627-633-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-627-633-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
51 NLLVLIAVARNSKFHSAMYLFLGNLAASDLL--AGVAFVANTLLSGSVTLRLTPVQW-FA 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            108 REGSAFIT-----LSASVFSLLAIAIAIAKV------KLYGSDKSCRMLLLIGA 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232 SELCRFUTAAPYCHMYASILLMTVISIDRFLAVVYPMQSLSWRTLGRASFTCLAIWALAI 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      155 SWLISLVL--GGLPILGWNCLGHLEACSTVL-----PLYAKHYVLCVVTIFSIILLAVV 206
                                                                                                                                                                                                                                                                                            194 FVTPVLFFYGSNWDSH---CNYFLPSSWEGTAYTVIHFLVGFVIPSVLILLFYQKVIKYI 250
                                                                                                                                                                                                                                                                                                                                                                                                  207 ALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLLLDYACPVH--SC 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GSVTLRLTPVQWF 106
                                     107 AREGSAFITLSASVFSLLAIAIERHVAIA----KVKLYGSDKSCRMLLLIGASWLI--S 159
                                                                                                                                                                              -----QYLTPGVQIYVLLSICIDRFYTIVYPLSFKVSREKAKK-----MIAASWIFDAG 193
                                                                                                                                                                                                                                          160 LVLGGLPILGWNCLGHLEACSTVLP-----LYAKHYVLCVVTIFSIILL----AVVALY 209
                                                                                                                                                                                                                                                                                                                                                               210 VRIYCVVRSSHADM-AAPQT-LALLKTVTIVLGVFIVCWLPAFSILLL-----DYACPV 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Labat, Ivan
APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Andarmani, Susan
APPLICANT: Andarmani, Susan
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
TITLE OF INVENTION: WHOBER: US/10/821,234
CURRENT PILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR APPLICATION NUMBER: US 60/462,047
NUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt SEQ genes Version 1.0
SEQ ID NO 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    262 HSCPILYKAHYLFA----VSTLNSLINPVIYTWRSRDLRREV-----LRPLQCWR 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 485;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Score 143; DB 6; Length 48; Pred. No. 2.2e-05; 57; Mismatches 121; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       407 BAAYFAYLLCVCVSSISSCIDPLIYYYASSECQRYVYSILCC 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265 PILYKAHYL-FAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
   LIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLS--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search completed: December 4, 2005, 06:42:27
```

This Fage Stark (uspin)

```
RESULT 1
US-09-731-030A-19
                                                                                                                                                                                                                                                                                                                                                                   US-09-731-030A-19
121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                   FEATURE:
ద
                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Appli
Sequence 17, Appl
Sequence 8, Appli
Sequence 9, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                          8, Appli
7, Appli
46, Appl
4, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Appl
Appl
Appl
                                                     December 4, 2005, 06:23:06; Search time 115.5 Seconds (without alignments) 1277.002 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                          Sequence 19, Appl
Sequence 22, Appl
                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 33, A Sequence 508, Sequence 19, A Sequence 3, Ap
                                                                                     US-10-084-507B-22
1809
1 MGSLYSEYLNPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                            Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6
Sequence 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence Sequence 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                    Published Applications AA Main:*

(cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*

cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
        GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                         US-09-771-063-2
US-09-842-507B-17
US-09-942-507B-17
US-09-971-228-9
US-09-971-228-9
US-10-225-567A-508
US-10-228-762-19
US-10-393-870-3
US-10-393-870-3
US-10-393-870-3
US-10-498-848-46
US-09-764-888-47
US-09-764-886-47
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-993-844-8
US-10-633-438-65
US-10-901-772-65
                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                             1867569 segs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                       - protein search, using sw model
                                                                                                                     BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                            *
Query
Match Length D
                                                                                                                                                                                                                                                                                                                                                                                           858.5
858.5
858.8
854.5
854.5
                                                                                                                      Scoring table:
                                                                                               Perfect score:
                                       OM protein
                                                                                                       Sедчепсе:
                                                                                                                                              Searched:
                                                                                                                                                                                                                                      Database
                                                       Run on
                                                                                                                                                                                                                                                                                                                                                                                                            Result
                                                                                                                                                                                                                                                                                                                                                            Š.
```

```
ö
                           Sequence 5, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 786, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSLLAIAIAERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                         72, Appl
2, Appli
30, Appl
38, Appl
                                                                                                                                                                                55760, A
15, Appl
8, Appli
2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                  ', App
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYINPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                            Sequence Sequence Sequence
                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Unknown Organism: Mammalian EDG
                 Sequence
Sequence
Sequence
                                                                                                 Sequence
                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 1809; DB 3; Length
100.0%; Pred. No. 3.4e-156;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                              Sequence 19, Application US/09731030A
Patent No. US20020142375A1
GENERAL INFORMATION:
APPLICANT: MUNROS, Donald G
APPLICANT: ASTANY, Roman L.
TILLE OF INVENTION: MAMMALIAN EDG-7 RECEPTOR HOMOLOGS
FILE REFERENCE: 8074-0015
CURRENT APPLICATION NUMBER: US/09/731,030A
CURRENT PILING DATE: 1998-12-29
PRIOR FILING DATE: 1997-12-30
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 19
US-11-026-435-8
US-09-971-228-13
US-09-863-455-2
US-09-863-455-2
US-09-964-099-1
US-10-98-192-786
US-10-225-567A-237
US-10-225-567A-237
US-10-225-567A-237
US-10-225-567A-237
US-10-225-1462-2
US-10-491-545A-30
US-10-491-645A-30
US-10-491-645A-30
                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0
Matches 353; Conservative
  TYPE: PRT
ORGANISM: Unknown
```

```
181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTILLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTUNSLLNPUYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FSLLAIAIBRHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
301 RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                            APPLICANT: MUNROE, DONALD G.
APPLICANT: MUNROE, DONALD G.
APPLICANT: FAMBOJ, RAJENDER
APPLICANT: FETERS, DIANA
APPLICANT: KOOSHESH, FATEMEH
APPLICANT: KOOSHESH, FATEMEH
APPLICANT: VYAS, TEJAL B.
APPLICANT: VYAS, TEJAL B.
APPLICANT: MOOSHESH, SAGWANI K.
TITLE OF INVENTION: AN ISOLATED HUMAN EDG-4 RECEPTOR
FILE REFERENCE: 108074-00023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 1809; DB 4; Best Local Similarity 100.0%; Pred. No. 3.4e-156; Matches 353; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/084,507B
CURRENT FILING DATE: 2002-08-12
PRIOR APPLICATION NUMBER: 09/222,995
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR PILING DATE: 1998-11-25
PRIOR PILING DATE: 1998-11-25
PRIOR PILING DATE: 1998-11-25
PRIOR PILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR SPLING DATE: 1998-04-03
PRIOR SPLING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PATENTIN VEY: 2.1
                                                                                                      Sequence 22, Application US/10084507B
Publication No. US20030054452A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-771-063-2
; Sequence 2, Application US/09771063;
; Patenn No. USZ0101034331A1
; GENERAL INFORMATION:
; APPLICANT: Derk J. Bergsma
; APPLICANT: Pamela Lane
; APPLICANT: Xiaotong Li
; APPLICANT: Xiaotong Li
; APPLICANT: Jeffrey L. Mooney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-084-507B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 NSKFHSAMYLPLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-084-50/B-1/)

Sequence 17. Application US/10084507B

Publication No. US20030054452A1

GENERAL INFORMATION:

APPLICANT: MANROE, DANALD G.

APPLICANT: KAMBOJ, RAJENDER

APPLICANT: KOCSHESH, FATEMEH

APPLICANT: KOCSHESH, FATEMEH

APPLICANT: WOSCHESH, FATEMEH

APPLICANT: WOSCHESH, FATEMEH

APPLICANT: WOSCHESH, FATEMEH

APPLICANT: GUPTA, ASHWANI K.

ITLE OF INVUNNION: AN ISOLATED HUMAN EDG-4 RECEPTOR

ITLE OF INVUNNION: AN ISOLATED HUMAN EDG-4

CURRENT APPLICATION NUMBER: US/10/084,507B

CURRENT FILING DATE: 1998-12-3

PRIOR PILING DATE: 1998-12-30

PRIOR PILING DATE: 1998-12-30

PRIOR PILING DATE: 1998-12-30

PRIOR PLING DATE: 1998-12-30

PRIOR PLING DATE: 1998-12-30

PRIOR APPLICATION NUMBER: 60/070,185

PRIOR PLING DATE: 1998-12-30

PRIOR APPLICATION NUMBER: 60/070,185

PRIOR PLING DATE: 1998-12-30

NUMBER OF SEQ ID NOS: 24

SEQ ID NO 17

LENGTH: 353
APPLICANT: Ping Taui
TILE OF INVENTION: EDG FAMILY GENE, HUMAN H218
FILE REFERENCE: GP-70431-C1
CURRENT APPLICATION NUMBER: US/09/771,063
CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: 09/150,650
PRIOR APPLICATION NUMBER: 60/082,776
PRIOR FILING DATE: 1998-09-03
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FREESEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1804; DB 3;
Pred. No. 9.7e-156;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 99.4
Matches 351; Conservative
                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: HOMO SAPIENS
US-09-771-063-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-084-507B-17
```

셤

셤 ઠે

ò

qq

ઠે

윱

Š

q

ઠે

셤

ò

```
APPLICANT: Masuda, Esteban
APPLICANT: Chu, Peter
APPLICANT: Pardo, Jorge
APPLICANT: Pardo, Jorge
APPLICANT: Di, Congfen
APPLICANT: Jiang, Haoran
APPLICANT: Jiang, Yingping
APPLICANT: Rigel Pharmaceuticals, Incorporated
TITLE OF INVENTION: EDG: Modulators of Lymphocyte Activation and Migration
FILE REFERENCE: 021044-000310US
FURRAWY PPLICANTON NUMBER: US(09/971,228
CURRENT FILING DATE: 2002-04-19
PRIOR FILING DATE: 2001-04-18
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVI 300  
241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVI 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                      241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 FSLLAIAIAIRHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGSLYSBYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 RPLQCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                  301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: human endothelial differentiation G-protein OTHER INFORMATION: coupled receptor (GPCR) 5 (EDG5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1787; DB 3;
Pred. No. 3.4e-154;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                        Sequence 9, Application US/09971228
Patent No. US20020155512A1
GENERAL INFORMATION:
APPLICANT: Liao, X. Charlene
APPLICANT: Masuda, Esteban
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sch 98.8%; al Similarity 98.9%; 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-971-228-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S:
Matches 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                         121
                                                                                                                                                  241
                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                       유
                                                            ઠે
                                                                                                 a
                                                                                                                                              8
                                                                                                                                                                              a
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTINSLINPUTYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                         FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                       61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NSKFHSAMYLFLGNLAASDLLAGVAFVANTILLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                               1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                        1 MGSLYSEYLNPUKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 RPLQCWRPGVGVGQRRRGGTPGHHLLPLRSSSSLERGWHWPTSPTFLEGNTVV 353
                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: KOSTENIS, EVA
APPLICANT: GASSENHUBER, Johann
TITLE OF INVENTION: EDG8 RECEPTOR, ITS PREPARATION AND USE
FILE REPERENCE: 38005-147
CURRENT APPLICATION NUMBER: US/09/842,316
CURRENT FILING DATE: 2001-04-26
FRIOR APPLICATION NUMBER: EP 116589.3
FRIOR PLICATION NUMBER: EP 108858.2
FRIOR PILING DATE: 2000-08-01
FRIOR APPLICATION NUMBER: EP 108858.2
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.1
SEQ ID NO 8
LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 353;
                                                                                                                                                                        Length 353;
                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                 Query Match

99.7%; Score 1803; DB 4;
Best Local Similarity 99.4%; Pred. No. 1.2e-155;
Matches 351; Conservative 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.8%; Score 1787; DB 3;
llarity 98.9%; Pred. No. 3.4e-154;
Conservative 1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 8, Application US/09842316
Patent No. US20020099191A1
GENERAL INFORMATION:
                                                                                                         Phe
                     ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: MOD RES
LOCATION: (273)
OTHER INFORMATION: Leu or Pl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 349; Conserv
                                                                                                                ; OTHER INFORMAT
US-10-084-507B-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 5
US-09-842-316-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-842-316-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
```

名

ઠે

셤

8

ò

9 9 120

180

180

240

240

```
241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSILAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                     121 FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                          181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NSKPHSAMYLFIGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 353;
  Length 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                            3; Indels
Score 1787; DB 4;
Pred. No. 3.4e-154;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1787; DB 4;
Pred. No. 3.4e-154;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: BOLINIA, James A.
APPLICANT: Huang, Ling Yan
APPLICANT: Boroway, Ling Yan
APPLICANT: Boroway, Beth E.
APPLICANT: Salon, John A.
APPLICANT: Wilson, Amy
APPLICATION UNDER: US/10/228,762
CURRENT APPLICATION NUMBER: US/09/356,315
PRIOR APPLICATION NUMBER: US/09/356,315
PRIOR APPLICATION NUMBER: 09/253,998
PRIOR PILING DATE: 1999-07-19
PRIOR APPLICATION NUMBER: 09/253,998
PRIOR PILING DATE: 1999-02-22
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn Ver: 2.0 - beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 19, Application US/10228762; Publication No. US20030130493A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.8%;
    98.88;
Query Match
Best Local Similarity 98.9°
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 98.9
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
CORGANISM: Homo sapiens
US-10-228-762-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-228-762-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                       ò
                                                                                                                           셤
                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                    ò
                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 508, Application US/10225567A
Publication No. US20030113798A1
GENERAL INFORMATION:
APPLICANT: LifeSpan Biosciences
APPLICANT: Brown, Joseph P.
APPLICANT: Brown, Joseph P.
APPLICANT: Roush, Christine L.
TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
FILE REFERENCE: 1920-4-4
CURRENT APPLICATION NUMBER: US/10/225,567A
CURRENT FILING DATE: 2001-12-19
PRIOR FILING DATE: 2001-12-19
PRIOR FILING DATE: 2001-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIXCVVRSSHADMAAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 VFIVCWLPARSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RPLQCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 353;
                                                           Sequence 33, Application US/09904099; Publication No. US20030119092A1; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Shorex, Juliet V
TITLE OF INVENTION: CHIMERIC G PROTEIN COUPLED RECEPTORS; FILE REFERENCE: 10602-013-999; CURRENT APPLICATION NUMBER: US/09/904,099; CURRENT APPLICATION NUMBER: US/09/904,099; NUMBER OF SEQ ID NOS: 38; SOFTWARE: Patentin version 3.1; SEQ ID NOS: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1787; DB 3;
Pred. No. 3.4e-154;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                     98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 2292
SOFTWARE: Patentin version 3.1
SEQ ID NO 508
LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 98.99
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-225-567A-508
                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-225-567A-508
                                            .09-904-099-33
                                                                                                                                                                                                                                                                                                                                                                                               US-09-904-099-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

g

셤

ઠ a

ઠે

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 353;
HILLS OF INVENTION: EDG8 RECEPTOR, ITS PREPARATION AND USE TILLS OF INVENTION: EDG8 RECEPTOR, ITS PREPARATION AND USE FILES OF INVENTION: EDG8 RECEPTOR, ITS PREPARATION AND USE CURRENT APPLICATION NUMBER: US/10/421,828

CURRENT FILING DATE: 2003-05-08

PRIOR FILING DATE: 2000-08-01

PRIOR FILING DATE: 2000-08-01

PRIOR FILING DATE: 2000-04-26

NUMBER: EP 108958.2

PRIOR FILING DATE: 2000-04-26

NUMBER: P 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7, Application US/10715117

Sequence 7, Application US/10715117

Publication No. US20040171037A1

GENERAL INFORMATION:
APPLICANT: LI, JING
APPLICANT: EIN, WIN CHEY
APPLICANT: YANG, JIANXIN
TITLE OF INVENTION: AMPLIFIED GENES INVOLVED IN CANG
FILE REFERENCE: 3000-20062
CURRENT FILING DATE: 2003-11-18
PRIOR FILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
PRIOR PILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
SOFTWARE: PATCHING DATE: 2002-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1787; DB 4;
Pred. No. 3.4e-154;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1787; DB 4;
Pred. No. 3.4e-154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 98.9
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
CRGANISM: Homo sapiens
US-10-421-828-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo sapiens
US-10-715-117-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
US-10-715-117-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/10393870

Sequence 3, Application US/10393870

Publication No. US20030219808A1

GENERAL INFORMATION:
APPLICANT: KOZTAN, Detlef

APPLICANT: SIEGER, Karl-Ernst
APPLICANT: BIEGER, Karl-Ernst
APPLICANT: BELETZE, Jean-Francois
APPLICANT: DELETZE, Jean-Francois
APPLICANT: DELETZE, Jean-Francois
APPLICANT: MACE, Sandrine
APPLICANT
APPLICANT: MACE, SANDRINE
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 TVLPLYAKHYVLCVVIIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                   241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTINSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 FSLLAIAIERHVAIAKVKLYGSDKSCRMILLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                           241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            301 RPLQCWRPGVGVGRRRXVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 98.8%; Score 1787; DB 4;
Best Local Similarity 98.9%; Pred. No. 3.4e-154;
Matches 349; Conservative 1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-421-828-8
; Sequence 8, Application US/10421828
; Publication No. US20030219874A1
; GENERAL INFORMATION:
; APPLICANT: KOSTENSIS, Eva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens
US-10-393-870-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
```

g

ò

ઠે

용

g

ઠે

셤

ò g ઠ 셤

ઠે

240

180

ဖ

```
241 VFIVCWLPAPSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NSKFHSAMYLPLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 FSLLAIAIAIAKWAIAKWKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGGLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 RPLOCWRPGVGVGRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                             301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1783; DB 3; Length 3
Pred. No. 8e-154;
1; Mismatches 4; Indels
                                                                                                                                                                                                                                                         APPLICANT: Derk J. Bergsma
APPLICANT: Derk J. Bergsma
APPLICANT: Derk J. Bergsma
APPLICANT: Nabil Elshourbagy
APPLICANT: Xiaotcong Li
APPLICANT: Xiaotcong Li
APPLICANT: Yiaotcong Li
APPLICANT: Ping Tsui
FILE REFERENCE: GP-70431-C1
CURRENT APPLICATION NUMBER: US/09/771,063
CURRENT FILING DATE: 1998-09-03
FRIOR APPLICATION NUMBER: 60/082,776
PRIOR PILING DATE: 1998-04-23
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21, Application US/10084507B; Publication No. US20030054452A1
FUBLICATION NO. US20030054452A1
APPLICANT: MUNROE, DONALD G.
APPLICANT: RAMBOJ, RAJENDER
APPLICANT: PETERS, DIANA
APPLICANT: ROSSHESH, FATEMEH
                                                                                                                                                                                                      Sequence 4, Application US/09771063; Patent No. US20010034331A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 98.6%;
Matches 348; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-10-084-507B-21
                                                                                                                                                                                     US-09-771-063-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-771-063-4
                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTILSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                               FSLIAIAIERHVAIAKVKLYGSDKSCRMLLLLIGGSWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                            NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                       61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                        VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                             241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYPFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                        PSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RPLQCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
  ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 46, Application US/10498848
Publication No. US20050153289A1
GENERAL INFORMATION:
APPLICANT: Takeda Chemical Industries, Ltd.
TITLE OF INVENTION: Method of Analyzing Gene Expression
FILE REFERENCE: PO2-0155PFT.
CURRENT FILING DATE: 2004-06-14
PRIOR APPLICATION NUMBER: US/10/498,848
PRIOR FILING DATE: 2001-12-14
PRIOR FILING DATE: 2001-12-14
PRIOR FILING DATE: 2002-02-21
PRIOR FILING DATE: 2002-02-21
PRIOR FILING DATE: 2002-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1787; DB 5;
Pred. No. 3.4e-154;
1; Mismatches 3;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 98.9
Matches 349; Conservative
  349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
US-10-498-848-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OKGANISM: nur
US-10-498-848-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 46
                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                        121
  Matches
                                                                                                                                                           g
                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                          셤
                                                                                                                       ò
                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

120 120 180 180

9 9

```
ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 FSLLAIAIAERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 VFIICWLDAFSILLLDSTCPVRACPVLYKAHYFPAFATLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

89.9%; Score 1625.5; DB 4; Length 352;
Best Local Similarity 89.5%; Pred. No. 1.8e-139;
Matches 316; Conservative 14; Mismatches 22; Indels 1;
APPLICANT: VYAS, TEJAL B.
APPLICANT: GUPTA, ASHWANI K.
TITLE GP INVENTION: AN ISOLATED HUMAN EDG-4 RECEPTOR FILE REFERENCE: 108074-00023
CURRENT APPLICATION NUMBER: US/10/084,507B
CURRENT FILING DATE: 2002.08-12,995
PRIOR PELLING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-04-03
PRIOR APPLICATION NUMBER: 60/080,610
PRIOR APPLICATION NUMBER: 60/090,610
PRIOR APPLICATION NUMBER: 60/090,610
PRIOR APPLICATION NUMBER: 60/090,610
PRIOR APPLICATION NUMBER: 60/090,610
PRIOR PRILING DATE: 1997-12-30
PRIOR PILING DATE: 1997-12-30
SOFTWARE: PALENTING DATE: 1997-12-30
ILENGTH: 352
                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                  US-10-084-507B-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
```

Search completed: December 4, 2005, 06:42:09 Job time : 116.5 secs



```
otolemur ga
artibeus ja
brachydanio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            brachydanio
bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  solenodon p
condylura c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tetraodon n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         xenopus lae
                                                                                                                                                                                                                                                                                                                                                                          m mus muscu
                                                                                                                                                                                                                                                                                                                                                                                    rattus norv
rattus norv
                                                                                                                                                                                                                                                                                                                                                                                                      mus musculu
brachydanio
                                                                                                                                                                                                                                                                                                                                                                                                                      cavia porce
rattus norv
                                                                                                                                                                                                                                                                                                                                                                                                                                        pongo pygma
homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mus muscu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cavia tschu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tadarida br
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      heterocepha
                                                                                                                                                                                                                                                                                                                                                                  095136 homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                         rattus norv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rattus norv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                castor cana
                                                 4, 2005, 06:38:02; Search time 152 Seconds (without alignments) 1638.497 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    taurus
                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                              1809
1 MGSLYSEYLNPNKVQEHYNY......LERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                          080397
08131782
091878
091878
091870
091870
091870
091870
091870
091830
001830
001830
001830
001830
001830
001830
001830
001830
001830
001830
001830
001830
001830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q8mk87
Q99nq7
Q99nr1
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                   hits satisfying chosen parameters:
                                                                                                                                                 2166443 segs, 705528306 residues
                                                                                                                                                                                                                                                                                                                                                         OBC3Q7 MOUSE DGS RAT
                                                                                                                                                                                                                                                                                                                                                                                                                              Q9ESKO_RAT
Q5R7A1_PONPY
Q9NYN8_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PO_BOVIN
E2_TETNG
_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTOGA
                                                                                                                                                                                                                                                                                                                                                                                                                      CAVPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      XENLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9EUTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q5U389 BRARE
Q5E9P3_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q99NQ7_AGOTA
Q99NR1_HETGA
                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9HYST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           D99NR4 HYSBR
                                                                                                                                                                                                                                                                                                                                                                                            6 RAT
MOUSE
BRARE
                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BEARE
                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                099NR8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271BNS
                                                                                                                        BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                 UniProt_05.80:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                     US-10-084-507B-22
                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                       Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  383
                                                  December
                                                                                                                                                                                                                                                                                                                                                                                                             Total number of
                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              836.5
835.8
822.5
820.5
819
816.5
816.5
816.5
816.5
816.5
816.5
816.5
816.5
816.5
816.5
                                                                                              Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                          1631.5
1625.5
1625.5
1622.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
839
837
837
                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                   1804
                                                                                                                                                                                                                                                                                                                                                                                                              966
                                                                                                                                                                                                                                                   Database :
                                                                                                                                                  Searched:
                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
                                                                                                                                                                                                                                                                                                                                         Result
                                                                                                                                                                                                                                                                                                                                                 Ņ.
```

w ,	4	=	_		Q9bf74 erinaceus c		_	Q91xr2 cavia porce	Q99nr9 tamias stri	-	Q9bf66 elephantulu	v	Q9bf41 panthera on
Q9BF72_SORAR	CARNON HADHA	Q9BF75_MYRTR	Q9BF76_TAMTE	Q99NR3 EREDO	Q9BF74 ERICO	оэвг79 сноно	Q99NR5 MOUSE	Q91XR2_CAVPO	Q99NR9_TAMST	QBMK86 MEGLY	Q9BF66 ELERU	Q9BF65 ORYAF	Q9BF41_PANON
01 0	N	~	~	7	~	7	7	~	~	~	~	~	7
326	326	326	326	326	326	326	326	292	325	326	326	326	325
45.0	45.0	44.9	44.9	44.9	44.9	44.9	44.9	44.8	44.7	44.6	44.6	44.6	44.5
813.5	813.5	812.5	812.5	812.5	811.5	811.5	811.5	811	809.5	807.5	807.5	806.5	805.5

ALIGNMENTS

```
10 EGOS HUMAN
11 EGOS HUMAN
12 EGOS HUMAN
12 EGOS HUMAN
13 EGOS HUMAN
14 EGOS HUMAN
15 EGOS HUMAN
16 EGOS HUMAN
16 EGOS HUMAN
17 ES-WAR-2004 (Rel. 43, Created)
18 EGOS HUMAN
19 EGOS HUMAN
10 EGOS HUMAN
19 EGOS HU
```

```
NUCLEOTIDE SEQUENCE.
STRAIN=C57BL/63; TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature 420:563-573 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hayashizaki Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=Edg5;
    181
                                        181
                                                                                                                                                                                                                                                                            MOUSE
                                                                                                                                                                                                                                                        RESULT 2
                                                                                                                                                                                                                                                                                               HID DE BERLET BE
                                                                                                                 셤
                                                                                                                                                                                              원
                                셤
                                                                          ò
                                                                                                                                                         ò
                                                                                                                                                     B Swiss-Prot entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the FWBL outstation - Buropean Bioinformatics Institute. There are no restrictions on its as long as its content is in no way modified and this statement is not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                phosphate (SIP). SIP is a bioactive lysophospholipid that elicits diverse physiological effect on most types of cells and tissues. When expressed in rat HTC4 hepatoma cells, is capable of mediating SIP-induced cell proliferation and suppression of apoptosis. SUBCELDULAR LOCATION: Integral membrane protein. SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; InterPro; InterPro; InterPro; InterPro; InterPro; InterPro; IPR004061; 2...

R InterPro; IPR004061; 2...

DR PRINTS; PR00237; GPCRHUDDOPSN.

DR PRINTS; PR00237; GPCRHUDDOPSN.

DR PROSITE; PS00237; G PROTEIN RECEP_FI_1; 1.

DR PROSITE; PS00262; G_PROTEIN_RECEP_FI_2; 1.

RW G-procein coupled receptor; Glycoprotein; Lipoprotein; KW Multigene family; Palmitate; Receptor; Transducer; Transmembrane.

TOPO_DOM 1 34 Extracellular (Potential).

TOPO_DOM 35 59 1 (Potential).

TOPO_DOM 35 59 1 (Potential).

SEXTRACELLULAR (Potential).

* (Potential).

* (Potential).

* (Potential).

* (Potential).

* (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7 (Potential).
Cytoplasmic (Potential).
S-palmitoyl cysteine (By similarity).
N-linked (GlcMcc. . ) (Potential).
F -> S (in Ref. 1).
G -> V (in Ref. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                  Malmi, 803.111; -. GO. 20004939; F:G-protein coupled receptor activity; TAS. GO; GO:0004939; F:Ipid binding; TAS. GO; GO:000187; F:activation of MAPK; TAS. GO; GO:0001187; P:activation of MAPK; TAS. GO; GO:0002186; P:G-protein coupled receptor protein signalin. . GO; GO:0006284; P:positive regulation of cell proliferation, TAS. InterPro; IPR000276; GPCR_Rhodpsn. InterPro; IPR0004063; EDGS receptor. InterPro; IPR004061; SIP_receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
FUNCTION: Receptor for the lysosphingolipid sphingosine 1-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1804; DB 1; Length 353;
Pred. No. 4.7e-114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                           Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Mismatches
                                                                                                                                                                                                                                                                                                                                 Ensembl; ENSG0000175898; Homo sapiens.
HGNC; HGNC:3169; EDG5.
                                                                                                                                                                                                                                                                        EMBL, AF034780; AAC98919.1; -; mRNA.
EMBL, AY262688; AAP20652.1; -; Genom:
EMBL; BC069598; AAH69598.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38867 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34
66
66
66
1128
2211
128
3353
3111
3113
318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         113
318
353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                        removed.
                                                                                                                                                         This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPO
    +
                                                                                                                                                                                                the
    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
Caralledine Segment 1. Shibata K., Yoshino M., Itoh M., Ishii Y., Ralle-C57BL/61, TISSUE-Lung;
A Rawai J., Shibata A., Fabbata K., Yoshino M., Itoh M., Ishii Y., Antawai J., Shinagawa A., Shibata K., Xonno H., Adachi J., Fukuda S., A Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., A Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kaukawa T., Saito R., Ashburner M., Batalov S., Casavant T., Racta K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Reischmann W., Gasaterland T., Gissi C., King B., Kochiwa H., Reischmann W., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., Sakai K., Okido T., Full F., Suzuki R., Tomita M., Mangher L., Washio T., Bakai K., Okido T., Fletcher C., Fujita M., Gariboldi M., Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Bronstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., Wynshaw-Boiis A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S., Winnekalla D., Boiis A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                300
240
                                                                                   240
                                                                                                                                                                                                                                 The FANTOM Consortium, the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
Mus musculus 13 days embryo lung cDNA, RIKEN full-length enriched
11braray, clone:04300398A03 product:endothellal differentiation,
sphingolipid G-protein-coupled receptor, 5, full insert sequence
(Endothelial differentiation, sphingolipid G-protein-coupled receptor,
TVL.PL.YAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                 TVLPLYAKHYVLCVVTIPSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLINPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Merazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Euarchontoglires, Glires, Rodentia, Sciurognathi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=CS7BL/6J; TISSUE=Lung; MEDLINE=99279253; Pubmed=10349636; DOI=10.1016/S0076-6879(99)03004-9; Carninoi P., Hayashizaki Y.; Hayashizaki Y.; Hayashizaki Y.; High-efficiency full-length cDNA cloning.";
                                                                                                                                                                                                                                                                                                                                                                           301 RPLOCWRPGVGVGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                 301 RPLOCWRPGVGVGKRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Meth. Enzymol. 303:19-44(1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=C57BL/6J; TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QBC3Q7_MOUSE PRELIMINARY;
Q8C3Q7;
```

```
ATTACHAILD SHUDANTE.

STRAIN-C57BL/GNCT; TISSUE-Hematopoietic Stem Cell;

MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

A Strausberg R.L., Feingold E.A., Grouse L.H., Derged J.G.,

RIJUBRER R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

A Lischul S.F., Zeeberg B., Buctow K.H., Schaefer C.F., Bhat N.K.,

RIJUBRER R.D., Gollins F.S., Wagner L., Shenmen C.M., Hong L.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

B Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Roberton M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Robask S.A., McEwan P.J., McKernan K.J., Lu X., Gubaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Rahes J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Barkseley R.W., Touchman M., Madan A., Rodrigues S., Sanchez A.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Rodriguez A.C., Grimwood J., Schwutz J., Myers R.M.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Roberton and initial analysis of more than 15,000 full-length human

R. Proc. Natl. Acad. Sci. U.S.A. 99:16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE.

STRAIN=C57BL/6J; TISSUB=Lung;
Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Adachi J., Aizawa K., Akimura T., Hara A., Hashizume W.,
A Fukuda S., Furuno M., Hanagaki T., Haraoka T., Hirozane T.,
Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Kasukawa T.,
A Hori F., Imotani Y., Itoh M., Kadawa I., Kaukaha J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,
A Katoh H., Kawai J., Kojima Y., Myazaki A., Murata M., Nakamura M.,
Nishi K., Nomura K., Numazaki R., Ohno M., Ohato N., Okazon N., Okazoki Y.,
A Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogbe Y., Tagami M.,
Tomaru A., Takahashi F., Takaku-Akahira S., Takada Y., Tanaka T.,
Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes."; Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (JUN-2005) to the EMBL/GenBank/DDBJ databases.
--- SUBCELLIDIAR LOCATION: Integral membrane protein (By similarity).
EMBL; SAOB5114; BAC33368.1; -; mRNA.
EMBL; BC096760; AAH96760.1; -; mRNA.
                                                                                                                                                                                                           STRAIN=C57BL/G5; TISSUB=Lung;
Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,
Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,
Konno H., Akiyama J., Nishi K., Kiteunai T., Tashiro H., Itoh M.,
Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,
Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,
Fujiwake S., Inoue K., Sakaguchi S., Ikegami T., Kashiwaji K.,
Fujiwake S., Inoue K., Togawa K., Tanawa M., Ohara E., Watahiki M.,
Yoneda Y., Ishikawa T., Ozawa K., Tanawa T., Matsuura S., Kawii J.,
Nataki Itograted sequence analysis (RISA) system-384-format
sequencing pipeline with 384 multicapillary sequencer.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=C57BL/6NCr; TISSUE=Hematopoietic Stem Cell; NIH MGC Project;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ensembl; ENSMUSG0000043895; Mus musculus.
MGI; MGI:99569; Edg5.
GO; GO:0007610; P:behavior; IMP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR004063; EDG5 receptor.
InterPro; IPR000276; GPCR_Rhodpsn.
InterPro; IPR004061; S1P_receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEQUENCE.
```

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VPIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-FEB-1996 (Rel. 33, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
Sphingosine I-phosphate receptor Edg-5 (SIP receptor Edg-5) (G-protein coupled receptor H218) (ARMI6) (Endothelial differentiation G-protein coupled receptor 5) (Sphingosine I-phosphate receptor 2) (SIP2).
Name-Edg5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Brain, and Lung;
MEDLINE=94373324; PubMed=8087418; DOI=10.1006/mcne.1994.1024;
Maclennan A.J., Browe C.S., Gaskin A.A., Lado D.C., Shaw G.;
"Cloning and characterization of a putative G-protein coupled receptor potentially involved in development.";
Mol. Cell. Neurosci. 5:201-209(1994).
                                                                                                                                                                                                                                                                                                                                                                                                               1 MGGLYSEYLNPEKVLEHYNYTKETLDMQETTSRKVASARIIILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGHVTLSLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Aortic smooth muscle;
MEDLINE=93176155; PubMed=8382486;
Okazaki H., Ishizaka N., Sakurai T., Kurokawa K., Goto K., Kumada M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 RPLQCWRRGKGVTG-RRGGNPGHRLLPLRSSSSLERGWHMPTSPTFLEGNTVV 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Molecular cloning of a novel putative G protein-coupled receptor expressed in the cardiovascular system."; Biochem. Biophys. Res. Commun. 190:1104-1109(1993).
                PRINTS; PRO1525; EDGSRECEPTOR.
PRINTS; PR00237; GPCRRHODOPSN.
PRO15175; PR01523; SIPRECEPTOR.
PROSITE; PS50262; G_PCRRIN_RECEP_F1_2; 1.
G-protein coupled receptor; Receptor; Transducer; Transmembrane.
SEQUENCE 352 AA; 38829 MW; 6A3E426B0FE54406 CRC64;
                                                                                                                                                                                                                                                DB 2; Length 352;
                                                                                                                                                                                                                                                                           ; Pred. No. 2.1e-102; 13; Mismatches 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ź
                                                                                                                                                                                                                                                90.2%; Score 1631.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352
                                                                                                                                                                                                                                                                                     90.1%;
                                                                                                                                                                                                                                                                                                               Matches 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                [3]
NUCLEOTIDE SEQUENCE.
TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                              est Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Takuwa Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RAT
                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EDG5_RAT
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A PACA REPARED BE SEED BE SEED
```

180 180

```
241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                        241 VFIICWLPAFSILLLDSTCPVRACPVLYXAHYFFAFATLNSLLNPVIYTWRSRDLRREVL 300
  61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTFLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gonda K., Takuwa Y.;
Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.

-1- SUBCELLULAR LOCATION.

EMBL, AB016031; BAA32464.1; -; mkNA.

EMBL, AB016031; BAA32464.1; -; mkNA.

EMBL, AB016031; BAA32464.1; -; mkNA.

EMBL, AB016031; Pilyeosphingolipid and lysophosphatidic acid . . .; IEA.

CO; GO:0001619; Pilyeosphingolipid and lysophosphatidic acid . . .; IEA.

R GO; GO:000186; Pilyercein coupled receptor protein signalin. . .; IEA.

R InterPro; IPR004063; EDGS receptor.

R InterPro; IPR004061; 31P_receptor.

R Fam; PF00001; 7tm 1; 1.

R FAMN; PR01523; EDGSRECEPTOR.

R PRINTS; PR01523; SIPRECEPTOR.
                                                                 121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                               181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                     1 MGSLYSEYLNPNKVOEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sclurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=93176155; PubMed=8382486;
Okazaki H., Ishizaka N., Sakurai T., Kurokawa K., Goto K., Kumada M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Gaps
                                                                                                                                                                                                                                                                                                   301 RPLOCWRPGVGVRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                            "Molecular cloning of a novel putative G protein-coupled receptor expressed in the cardiovascular system."; Biochem. Biophys. Res. Commun. 190:1104-1109(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS50262; G-PROTEIN.
G-protein coupled receptor; Transducer; Transmembrane.
SEQUENCE 352 AA; 38735 MW; 9C933A18E756CEIE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89.9%; Score 1625.5; DB 2; Length
89.5%; Pred. No. 5.5e-102;
ive 14; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    352 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TrEMBLrel. 31, C
(TrEMBLrel. 31, I
(TrEMBLrel. 31, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 89.5%
Matches 316; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q54A16_RAT PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-SEP-2005 (13-SEP-2005 (13-SEP-2005 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Aorta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=AGR16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Takuwa Y.;
                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          254AI6
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
Q54A16_
                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                          g
                                                                                                                                                                                                                                                     a
                                                                                                                             ò
                                                                                                                                                                  셤
                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ⋩
                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    မ္မ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                            the sphingosine 1-phosphate receptors EDG-1, EDG-3, and EDG-5.";
J. Biol. Chem. 274:18997-19002(1999).
-!- FUNCTION: Receptor for the lysosphingolipid sphingosine 1-
phosphate (SIP). SIP is a bioactive lysophospholipid that elicits
diverse physiological effect on most types of cells and tissues.
-!- SUBCELIVIAR LOCATION: Integral membrane protein.
-!- TISSUE SPECIFICITY: Expressed in all developing tissues with
highest levels detected in primitive, transformed cells. Relative abundance: lung > kidney = skin = gut > spleen > brain > liver.
-!- SIMILARITY: Belongs to the G-protein coupled receptor I family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAPIIILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
MEDLINE=98072391; PubMed=9409733; DOI=10.1016/S0014-5793(97)01301-X; An S., Bleu T., Huang W., Hallmark O.G., Coughlin S.R., Goetzl E.J.; "Identification of cDNAs encoding two G protein-coupled receptors for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1, Gaps
                                                                                                                                                PubMed=10383399; DOI=10.1074/jbc.274.27.18997;
Ancellin N., Hla T.;
"Differential pharmacological properties and signal transduction of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytoplasmic (Potential).
S-palmitoyl cysteine (By similarity).
N-linked (GlcNAc. . .) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00001; 7tm 1; 1.

PRINTS; PR01525; BDGSRECEPTOR.

PRINTS; PR01523; GPCRRHODOPSN.

PRINTS; PR01523; SIPRECEPTOR.

PROSITE; PS00237; GPROTEIN RECEP F1 1; FALSE_NEG.

PROSITE; PS00262; GPROTEIN RECEP_F1 2; 1.

G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89.9%; Score 1625.5; DB 1; Length 352; 89.5%; Pred. No. 5.5e-102; ive 14; Mismatches 22; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GO; GO:0004930; F:G-protein coupled receptor activity; IDA. InterPro; IPR004063; EDGS_receptor. InterPro; IPR000276; GPCR_Rhodpsn. InterPro; IPR004061; SIP_receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytoplasmic (Potential).
2 (Potential).
2 (Potential).
Extracellular (Potential).
3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential).
5 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Extracellular (Potential).
7 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -linked (GlcNac. . .) (Po
9C933A18E756CE1E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL, AF022138, AAC53494.1; -; mRNA.
PIR, JC1465, JC1465.
Ensembl, ENSRNOG0000020653; Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U10699; AAA19241.1; -; mRNA
                                                                                                                               PHARMACOLOGICAL CHARACTERIZATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         38735 MW;
                                                               lysosphingolipids.";
FEBS Lett. 417:279-282(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 89.5
Matches 316; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Receptor; Transducer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     352 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68334; Edg5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIPID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPO DOM
TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TRANSMEM
TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPO_DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RGD;
```

ä

9 9

NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120

61

ò

120

NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV

61

ઠે 셤 ò S

```
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                      300
NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Copetann N.C., JOHNING N.A.;

Copetann N.C., JOHNING N.A.;

Indentification, chromosomal location, and genome organization of mammalian G-protein-coupled receptors.";

Genomics 18:175-184(1993).

C. -- FUNCTION: Receptor for the lysosphingolipid sphingosine 1-phosphate (SIP). SIP is a bloactive lysophospholipid that elicits diverse physiological effect on most types of cells and tissues.

C. -- SUBCELLULAR LOCATION: Integral membrane procein.

C. -- TISSUE SPECIFICITY: Most abundant in heart and lung; low, but clearly observed in kidney, liver and thymus; much lower but detectable in brain, testis, stomach and intestine. Not significantly detected in any of the sections of embryonic day (E) 14-18, except in embryonic brain.

C. -- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P52592; Q9R236;
01-OCT-1996 (Rel. 34, Created)
29-MAR-2004 (Rel. 43, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
Sphingosine 1-phosphate receptor Edg-5 (SIP receptor Edg-5)
(Lysophospholipid receptor B2) (Endothelial differentiation G-protein
coupled receptor 5) (Sphingosine 1-phosphate receptor 2) (SIP2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \Theta
                                                 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                       181 TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                241 VFIICWLDAFSILLLDSTCPVRACPVLYKAHYFFAFATLNSLLNPVIYTWRSKDLRREVL
                                                                                                                                                           TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                    VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     elicits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=99132320; PubMed=9931453; DOI=10.1016/S0378-1119(98)00589-7; Zhang G., Contos J.J.A., Weiner J.A., Fukushima N., Chun J.; "Comparative analysis of three murine G-protein coupled receptors activated by sphingosine-1-phosphate.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=94116980; PubMed=8288218; Wilkie T.M., Chen Y., Gilbert D.J., Moore K.J., Yu L., Simon M.I., Copeland N.G., Jenkins N.A.;
                                                                                                                                                                                                                                                                                                                                                                                                       301 RPLLCWRQGKGATG-RRGGNPGHRLLPLRSSSSLERGLHMPTSPTFLEGNTVV 352
                                                                                                                                                                                                                                                                                                                                                                        RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     352 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE, AND TISSUE SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AF108020; AAD16976.1; -; Genomic_DNA.
EMBL; L20334; AAA16846.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ensembl; ENSMUSG00000043895; Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEOTIDE SEQUENCE OF 62-241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; E48909; E48909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Testis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOUSE
                                                                                                         121
                                                    121
                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATA TARAN T
                                                                                                   셤
                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                   윱
                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                 ò
                                                                                                                                                           ò
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                        ઠ
```

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VPIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
GO; GO:0007610; P:behavior; IMP.
InterPro; IPR004063; BDG5 receptor.
InterPro; IPR004061; BDG5 receptor.
InterPro; IPR004061; BDG5 receptor.
InterPro; IPR004061; SIP_receptor.
InterPro; IPR004061; Ttm 1; 1.
PRINTS; PR01525; EDGSRECEPTOR.
PRINTS; PR01523; SIPRECEPTOR.
PRINTS; PR01523; GPROTEIN RECEP_F1_1; PARTIAL.
PROSITE; PS00224; GPROTEIN RECEP_F1_2; 1.
G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
                                                                                                                                                                                                                                                       Cytoplasmic (Potential).

Cytoplasmic (Potential).

Extracellular (Potential).

Cytoplasmic (Potential).

Cytoplasmic (Potential).

Extracellular (Potential).

Sytoplasmic (Potential).

Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EDG5_BRARE STANDARD; PRT; 370 AA.
29-MAR-2004 (Rel. 43, Created)
29-MAR-2004 (Rel. 43, Last sequence update)
29-MAR-2005 (Rel. 47, Last annotation update)
10-MAY-2005 (Rel. 47). Last annotation update)
Sphingosine 1-phosphate receptor Edg-5 (SIP receptor Edg-5) (Sphingosine 1-phosphate receptor 2) (SIP2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22; Indels
                                                                                                                                                                                                                                          Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 1622.5; DB 1
; Pred. No. 8.7e-102;
13; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38871 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 89.89
Matches 317; Conservative
                                                                                                                                                                                                                                                             59
66
66
109
1128
1147
1173
1189
                                                                                                                                                                                                                                                                                                                                                                                                                                            233
233
223
223
323
332
305
106
114
189
                                                                                                                                                                                                                 Receptor, Transducer;
TOPO_DOM 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   352 AA;
                                                                                                                                                                                                                                                             35
60
60
67
96
1110
1123
1112
234
225
225
225
234
106
1175
1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRANSMEM
TOPO DOM
LIPID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                  TRANSMEM
TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONFLICT
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                 TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                        TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                      TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRANSMEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EDG5_BRARE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8844488
8844488
```

Mon Dec

```
This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the Buropean Bioinformatics institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
              Eukaryota; Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
                                                                    NUCLECTIDE SEQUENCE, AND VARIANTS MIL HIS-150 AND CYS-167. MEDILINE-20365730; PubMed=10910360; DOI=10.1038/35018092; Rupperman B., An S., Osborne N., Waldron S., Stainier D.Y.R.; Ha sphingosine-1-phosphate receptor regulates cell migration during vertebrate heart development.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS; PRO0642; EGGIRECEPTOR.
PRINTS; PRO1237; GPCRRHODOPSN.
PRINTS; PRO1237; GPCRRHODOPSN.
PROSITE; PS00237; G PROTEIN RECEP F1 1; 1.
PROSITE; PS00245; G PROTEIN RECEP F1 2; 1.
Disease mutation; G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate; Receptor; Transducer; Transmembrane.
TOPO DOM 1 57 Extracellular (Potential).
TRANSMEM 58 78 1 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 (Potential).
Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 (Potential).
Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 (Potential).
Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytoplasmic (Potential).
        rerio (Zebrafish) (Danio rerio).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF260256; AAF88001.1; -; mRNA.
Ensembl; ENSDARG00000009719; Danio rerio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZFIN, ZDB-GENE-020123-2; edg5.
InterPro; IPR000987; EDG1receptor.
InterPro; IPR000276; GPCR Rhodpsn.
InterPro; IPR004061; SIP_receptor.
Pfam; PF000001; 7tm_1; 1.
                                                                                                                         Nature 406:192-195(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57
78
87
108
128
149
167
188
Name=edg5;
Brachydanio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPO DOM
TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TRANSMEM
```

```
234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135 ALSASVFSLLAIAIERYIAITKVKVYGSNKTCRMFLLIGACWYNSILLGGLPIIGWNCIN 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           235 VTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRD 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       255 VIVLGUFILCWLPAFTILLLDTSCXMKQCPILNNAGIFFSFATLNSALNPLIYTLRSKD 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          115 TLSASVFSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLG 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytoplasmic (Potential).
Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
7 (Potential).
Cytoplasmic (Potential).
S-palmitoyl cysteine (By similarity).
N-linked (GlCNAC. . .) (Potential).
R -> H (in mil, allele m93; lack of SIPmediated signaling).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 SKYSQYFNKTLIQVHYLTAKEMTAEBLRDRIBSKQSLSS--LNILFVVICSIIILENLLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                175 HLEACSTVLPLYAKHYVLCVVTIPSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 SLYSEYLNPNKVQEHYNYTKE-----TLETQETTSRQVASAFIVILCCAIVVENLLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55 LIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'n
                                                                                                                                                                                                                                                                                                                                                                                                                                    73; Indels 18; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Endothelial differentiation sphingolipid G-protein-coupled receptor
                                                                                                                                                                                                                                                                R -> C (in mil; allele te273; lack of SIP-mediated signaling).

8C6B3A06DEEA6757 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cariamorellus (Guinea pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=hartley; TISSUE=Myenteric plexus;
Segura B.J., Xiao L., Cowles R.A., Turner D.J., Logsdon C.D.,
Mulholland M.W.;
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                             55.2%; Score 998; DB 1; Length 370; 58.2%; Pred. No. 1.5e-59; ive 52; Mismatches 73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              315 MRKEFLRVLCCW-----GLLNCGRPPHRCMVPLKSSSSME 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295 LRREVLRPLQCWRPGVGVGQRRRGGTPGHH-LLPLRSSSSLE 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          202 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                          370 AA; 41777 MW;
                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 58.2%
Matches 199; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q91XRO CAVPO PRELIMINARY;
Q91XRO;
                                                                                                                                                                                                                                                                        167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10141;
     215
236
255
276
290
311
325
24
150
                                                                                                                                                                                                                                                                        167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Fragment)
                                                                                TOPO DOM
TRANSMEM
TOPO DOM
LIPID
CARBOHYD
                           TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                          SEQUENCE
  TRANSMEM
                                                                                                                                                                                                                                                                        VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAVPO
     834444444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DE RESTRESE DE LA PROPERTICIO DEL PROPERTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

88888**2**F**F**S

```
62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
GSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIG 153
                                                                                    214 CVVRSSHADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYL 273
                                                                                                                                                       121 FVVRSSHADVAGPQTLALLKTVTIVLGVFIICWLPAFSILLLDSTCPVRACPVPKKAHYF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pongo pygňaeus (Orangutan).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 SSVSDYVNYDIIVRHYNYTGKLNISADKENSIKLTSVVFILICCFIILENIFVLLTHWKT
                   ASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLAVVALYVRIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gapв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRINTS; PRO0642; EGGIRECEPTOR.
PRINTS; PRO1148; EDG2RECEPTOR.
PRINTS; PRO1037; GPCRRHODOPSN.
PRINTS; PRO1523; S1PRECEPTOR.
PROSTITS; PSO10237; G PROTEIN RECEP F1 1; 1.
PROSITE; PS50262; G PROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Hypothetical protein; Receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         47.3%; Score 856; DB 2; Length 382; 51.1%; Pred. No. 5.9e-50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          382 AA; 42773 MW; 6F0841D0E93789CC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR004061; SIP_receptor..
PANTHER; PTHR19266:SF5; EDG1receptor; 1.
                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                01-FEB-2005 (TrEMBLrel. 29, Created 01-FEB-2005 (TrEMBLrel. 29, Last se 01-FEB-2005 (TrEMBLrel. 29, Last an Hypothetical protein DKFZp469M1119. Name=DKFZp469M1119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The German cDNA Consortium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ransmembrane
                                                                                                                                                                                                                                                                                                                               QSR7A1 PONPY PRELIMINARY;
QSR7A1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 161; Conservative
                                                                                                                                                                                                            FAVSTLNSLL 283
                                                                                                                                                                                                                                 || :|||||
FAFATLNSLL 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00001; 7tm 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pongo.
NCBI_TaxID=9600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Transducer;
                                                                        154
                                                                                                                                                                                                             274
                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                  9
PONPY
                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                            셤
                                                                    ò
                                                                                               셤
                                                                                                                                         ò
                                                                                                                                                                        셤
                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                 YGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLBACSTVLPLYAKHYVLCVVTIFS 199
                                                                                                                                                                                                                                                                    1 YTKETLDVRETTSRQVASAFIVILCCAIVVENLLVLVAVGRNSKLHSAMYLFLGNLAASD 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carroll S.L., Miller M.L., Benedict-Hamilton H.M.;
Carroll S.L., Miller M.L., Benedict-Hamilton H.M.;
Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF090995; AAG24259.1; -; mRNA.
GO; GO:001619; F.lysosphingolipid and lysophosphatidic acid . .,; IEA.
GO; GO:0001619; F.lysosphingolipid and lysophosphatidic acid . .,; IEA.
GO; GO:000186; F.lysosphingolipid and lysophosphatidic acid . .,; IEA.
GO; GO:0007186; F.lysosphingolipid are receptor protein signalin. .,; IEA.
GO; GO:0007186; P.signal transduction; IEA.
InterPro; IPR004063; EDG5 receptor
InterPro; IRR004061; SPP-receptor.
                                                                                                                                                                                                                                                  20 YTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Buarchontoglires, Glires, Rodentia, Sciurognathi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00001; 7tm 1; 1.—PRINTS; PR01525; EDGSRECRPTOR.
PRINTS; PR01525; EDGSRECRPTOR.
PRINTS; PR01523; SIPRECPTOR.
PROSITE; PS50262; G PROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Receptor; Transducer; Transmembrane.
   PRINTS; PRO1525; EDG5RECEPTOR.
PRINTS; PRO1523; GPCRRHODOPSN.
PRINTS; PRO1523; SIPRECEPTOR.
PROSITE; PSO1237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
PROSITE; PSS50262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Recep_Cor; Transducer; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      48.0%; Score 869; DB 2; Length 190; 88.4%; Pred. No. 4.1e-51; rive 10; Mismatches 12; Indels
                                                                                                                                                                             Length 202;
                                                                                                                                                                         Query Match 51.5%; Score 912; DB 2; Length 20
Best Local Similarity 91.1%; Pred. No. 2.4e-55;
Matches 184; Conservative 10; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     190 AA; 20718 MW; 3CA0A5C188E168B1 CRC64;
                                                                                                                          202 202
202 AA; 21836 MW; D9814EC85B42320A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Putative G-protein coupled receptor (Fragment).
Name=GPCR18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200 IILLAVVALYVRIYCVVRSSHA 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 88.4
Matches 168; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9ESKO_RAT PRELIMINARY;
Q9ESKO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Muridae, Murinae, Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER
NON TER
SEQUENCE
                                                                                                          NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q9ESK0
```

SO THE DESCRIPTION OF THE PROPERTY OF THE PROP

셤

ઠ

ò

요

음 8

ò

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUB-Lung;

MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

METARUBDERR R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenco L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

B Rownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

R Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

B Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,

Richards S., Worley K.C., Hae S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

R Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

B Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

R Odinguez A.C., Grimwood J., Schmutz J., Myers R.M.,

B Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

B Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

B Bronserch A., Schein J.E., Jones S.J.M., Marra M.A.;

R Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                            231 LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Euarchontoglires, Primates, Catarrhini, Hominidae,
                                                                                                                                                      SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                           VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS------SHADMAAPQTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2000 (TrEMBLrel. 13, Last sequence update)
G protein-coupled sphingolipid receptor (EDG1 protein) (Endothelial differentiation, sphingolipid G-protein-coupled receptor, Name-CHEDG1; Synonyms-EDG1; ORFNames=RP4-575N6.1-001; Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE.
Halleck A., Ebert L., Mkoundinya M., Schick M., Eisenstein S.,
Neubert P., Kstrang K., Schatten R., Shen B., Henze S., Mar W.,
Korn B., Zuo D., Hu Y., Labaer J.,
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tigyi G.J. Sr., Wang D. Sr.;
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382 AA
                                                                                                                                                                                                                                                                                                                                     291 RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                   314 TNKEMRRAFIRIMSC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9NYN8 HUMAN PRELIMINARY;
Q9NYN8; Q9BYY4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and mouse
                                                                                                                           182
                     122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1 10 CONTING IT 10 CONT
                                                                                                                                                                                                                                                                          g
                                                                g
                                                                                                                      à
                                                                                                                                                                    윱
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                  ò
```

```
230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74 KKFHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVF 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   231 ILKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                             EMBL; AC10850; AAF43420.1; -; mRNA.

REMBL; AC10850; AAF43420.1; -; mRNA.

REMBL; AC10850; AAF43420.1; -; mRNA.

REMBL; CR04850; AAF43420.1; -; mRNA.

REMBL; CR542269; CA647065.1; -; mRNA.

REMBL; AL109741; FA120941; -; GAF000017089; Howenbrane; IEA.

GO; GO:001619; F: Inyeopphingolipid and lysophosphatidic acid . . .; IEA.

RO; GO:000186; P: R: Tyeopphingolipid and lysophosphatidic acid . . .; IEA.

RO; GO:000186; P: R: Tyeopphingolipid and lysophosphatidic acid . . .; IEA.

RO; GO:000186; P: S: Proceptor acceptor protein signalin. . .; IEA.

RO; GO:000186; P: S: Signal transduction; IEA.

RILEFPRO; IPR000987; EDGIRCECPTOR.

RILEFPRO; IPR000277; EDGIRCECPTOR.

RILEFPRO; IPR000277; EDGIRCECPTOR.

RILEFPRO; IRR002277; EDGIRCECPTOR.

RILEFPRO; IRR002277; EDGIRCECPTOR.

RILEFPRO; IRR002277; EDGIRCECPTOR.

RILEFPRO; IRR002277; EDGIRCECPTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 SSVSDYVNYDIIVRHYNYTGKLNISADKENSIKLISVVFILICCFIILENIFVLLTIWKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           182 VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS-----SHADMAAPQTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       u_rEB-1996 (Rel. 33, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
Sphingosine 1-phosphate receptor Edg-1 (Sphingosine 1-phosphate
receptor 1) (S1P1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transducer; Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46.9%; Score 849; DB 2; Length 382; 50.5%; Pred. No. 1.8e-49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84; Indels
Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OCCE8685A5E1BAD2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INTERFORM THROUGH STANDARD THROUGH STAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 1.8e-49;
60; Mismatches 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              383 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314 TNKEMRRAFIRIMSC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 50.5%
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     291 RSRDLRREVLRPLOC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat).
```

```
g
                                                                                                                                                              셤
                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                 셤
                                                            8
                                                                                          셤
                                                                                                                             8
                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                 This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                         A Lado D.C., Browe C.S., Gaskin A.A., Borden J.M., Maclennan A.J.;

T. Lado D.C., Browe C.S., Gaskin A.A., Borden J.M., Maclennan A.J.;

T. Cloning of the rat edg-1 immediate-early gene: expression pattern suggests diverse functions.";

Gene 149:311-336(1994).

C. I. FUNCTION: Receptor for the lysosphingolipid sphingosine 1-phosphate (SIP). SIP is a bioactive lysophospholipid that elicits diverse physiological effect on most types of cells and tissues. This inducible epithelial cell G-protein-coupled receptor may be involved in the processes that regulate the differentiation of endothelial cells. Seems to be coupled to the G(i) subclass of heteromeric G proteins (By similarity).

C. I. SUBCELDULAR LOCATION: Integral membrane protein.

C. I. DEVELOPMENTAL STAGE: First detected at embryonic day 15. At postnatal day 14 detected in skin, spleen, liver, kidney, heart, testicle, lung and brain. At adulthood is most abundant in brain.

C. I. SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                MEDLINE=95047498; PubMed=7959012; DOI=10.1016/0378-1119(94)90171-6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phosphoserine (Potential).
S-palmitoyl cysteine (By similarity).
N-linked (GlcNAc. ..) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PROJECT EDGIRECEPTOR.
PRINTS; PRO1148; EDGIRECEPTOR.
PRINTS; PRO1148; EDGIRECEPTOR.
PRINTS; PRO1137; GPCRHODOPSN.
PROSITE; PSO1237; GPROTEIN RECEP F1 1; 1.
PROSITE; PSO5025; GPROTEIN RECEP F1 1; 1.
G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate; Phosphorylation; Receptor; Transducer; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GO:0004930; F:G-protein coupled receptor activity; T:GO:0045446; P:endothelial cell differentiation; IEP. GO:0030182; P:neuron differentiation; IEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
7 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (Potential).
Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -linked (GlcNAc. . .) (P. 090BA6AEE09DB4F3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GO; GO:0019226; P:transmission of nerve impulse; IEP. InterPro; IPR000987; EDGIreceptor.
InterPro; IPR002277; EDG2 receptor.
InterPro; IPR00276; GPCR_Rhodpsn.
InterPro; IPR004061; SIP receptor.
PANTHER; PTHR19266:SF5; EDG1receptor; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U10303; AAA83418.1; -; mRNA.
PIR; I53870; I53870.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    42746 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  383
354
329
                                 NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61958; Edg1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPO DOM
TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ropo DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>rrans</u>mem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RES
                                                                                                                                                                                                                                                                                                                                                                                                                                            removed
```

Gaps

61; Mismatches 103; Indels 14;

Conservative

Best Local Similarity Matches 167; Conserv

Query Match

46.8%; Score 847; DB 1; 48.4%; Pred. No. 2.4e-49;

```
Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Rausner R.D., Colling F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,
Altschul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,
Ra Hopking R.F., Jordan H., Moore T., Max S.I., Wang J., Heishe F.,
Expleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Rapa Brownstein M.J. Usdin T.B., Tochiyuki S., Carninci P., Prange C.,
Ra Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Rosak S.A., McKernan R.J., Maranon R.D., Mullahy S.J.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
A. Wilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
A. Hatkebley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
B. Manner C. M. Schain J.E., Warra M.A.;
R. Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                     254
                                                                          121
                                                                                              181
                                                                                                                                                                         230
                                                                                                                                                                                                                                                                                                           LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                 61
                    3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                          62 SKFHSAMYLFLGNLAASDLIAGVAFVANTLLSGSVTLRLTPVOWFAREGSAFITLSASVF
                                                                                                                                                    SLIAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                   VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS------SHADMAAPOTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Buarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -1- SUBCELLUTAR LOCATION: Integral membrane protein (By similarity).
-1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
EMBL; BC097938; AAH97938.1; -; mRNA.
InterPro; IPR000987; EDGIERECEPTO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TrEMBLrel. 31, Created)
(TrEMBLrel. 31, Last sequence update)
(TrEMBLrel. 31, Last annotation update)
differentiation sphingolipid G-protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                            315 TUKEMRRAFIRIISCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS 359
                                                                                                                                                                                                                                                                                                                                                                                        291 RSRDLRREVLRPLQCWR-PGVGVQGR-RRGGTPGHHLLPLRSSSS 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (JUN-2005) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q4V7F6 RAT PRELIMINARY;
Q4V7F6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           [2]
NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH MGC Project,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-SEP-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-SEP-2005
13-SEP-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Name=Edg1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and mouse
                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                      255
                                        15
                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                               231
```

```
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
    4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      290
                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  195 VLPLYHKHYILFCTTVFTLLLLSIVILYCRIYSLVRTRSRRLTFRKNISKASRSSBKSLA 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LLKTVIIVLSVFIACWAPLFILLLLDVGCKAKTCDILYKAEYFLVLAVLNSGTNPIIYTL 314
                                                                                                                                                                                                                                                                                                                                                                                                              74
                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Mus musculus adult male lung cDNA, RIKSN full-length enriched library,
clone:1200004B16 product:andothelial differentiation sphingolipid G-
protein-coupled receptor 1, full insert sequence (Endothelial
differentiation sphingolipid G-protein-coupled receptor 1).
                                                                                                                                                                                                                                                                                                                                                                                              | |:| | : ||||| | : : : | | : | |:| | : | | : | | : | | : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | | : | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW
                                                                                                                                                                                                                                                                                                                                                                      3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS-----SHADMAAPQTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Euarchontoglires, Glires, Rodentia, Sciurognathi,
Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=C57BL/6J; TISSUE=Lung;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=CS7BL/GJ; TISSUB=Lung; MEDLINE=CS7BL/GJ; TISSUB=Lung; MEDLINE=2108560; PubMed=11217851; DOI=10.1038/3505500; MEDLINE=2108560; PubMed=11217851; DOI=10.1038/3505500; MEDLINE=2108560; Shinbata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
             InterPro; IPR000276; GPCR_Thodpsn.
InterPro; IPR000461; SIP_receptor.
Pfam; PF00001; 7tm 1; 1.P_receptor.
PRINTS; PR00148; EDGIRECEPTOR.
PRINTS; PR00137; GPCRHODOPSN.
PRINTS; PR00137; GPCRHODOPSN.
PRINTS; PR00137; GPRCEPTOR.
PROSTIE; PS00237; G_PROTEIN RECEP F1 1; 1.
PROSTIE; PS00262; G_PROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Receptor; Transmembrane.
SEQUENCE 383 AA; 42746 MM; 090BA6AEBO9DB4P3 CRC64;
                                                                                                                                                                                                                                                                                                                           14;
                                                                                                                                                                                                                                                                                 Length 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RSRDLRREVLRPLOCWR-PGVGVQGR-RRGGTPGHHLLPLRSSSS 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 315 TNKEMRRAFIRIISCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS 359
                                                                                                                                                                                                                                                                                                                         61; Mismatches 103; Indels
                                                                                                                                                                                                                                                                              46.8%; Score 847; DB 2; 48.4%; Pred. No. 2.4e-49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9DC35_MOUSE PRELIMINARY;
Q9DC35;
                                                                                                                                                                                                                                                                                                                         Matches 167; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=Edg1;
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255
                                                                                                                                                                                                                                                                                                                                                                                                              15
                                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      291
                                                                                                                                                                                                                                                                                 Query Match
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
Asiato T., Ognarait Y., Goldborf T., Done H., Kandawa T., Salto R., Madole T., Ognarait Y., Goldborf T., Done H., Kandawa T., Salto R., Madole T., Manner H., M. Madole T., Manner H., M. Manner H., Manner
```

```
DATE OF THE SERVICE O
                                                                                                                                                          ઠે
                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                        쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Crausberg R.;

Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.

Lisourcary R.;

Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.

- :- SUBCELLUAR LOCATION: Integral membrane protein (By similarity).

EMBL; BC049094; AAH49094.1; -; mRNA.

EMBL; BC051023; AAH49094.1; -; mRNA.

EMBL; BC051023; AAH51023.1; -; mRNA.

EMBL; BC051023; AAH31023.1; -; mRNA.

EMBL; BC051023; AAH31023.1; -; mRNA.

EMBL; BC051023; AAH31023.1; -; mRNA.

GO; GO:000152; P: Subjuganesis I. IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

GO; GO:000193; P: G-protein signaling, adenylate cyclase inhi. . .; IDA.

InterPro; IPR00040; EDGL receptor.

InterPro; IPR00040; FECEPTOR.

InterPro; IPR00041; SIP receptor; I.

PEAN; PR001149; EDGLECEPTOR.

BR FRINTS; PR01149; EDGLECEPTOR.

BR FRINTS; PR01237; G-PROTEIN RECEP FI. 1; UNKNOWN. I.

PROSITE; PS00237; G-PROTEIN RECEP FI. 2; 1.

ROSITE; PS00262; G-PROTEIN RECEP FI. 2; 1.

KW G-PROTEIN COUDLEd receptor; Receptor; Transmembrane.

SQUENCE 382 AA; 42639 MW; SFE4C9A2BD65CB2A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CSTRAIN-CSTBL/6; TISSUB-Eye, and Mouse;

WEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RETAURDENG R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RIAUSHOR R.L., Zeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haich F.,

Datchenko, L., Marusins K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Richards S., Worley W., Sodergren E.J., Lu X., Gibbs R.A.,

Rahey J., Helton B., Ketreman M., Madan A., Rodrigues S., Sanchez A.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

Butterfield X.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Butterfield X.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

Butterfield X.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

Butterfield X.S.N., Marsh V.B., Marsh M.A.,

B
                                                    Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H.,
Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H.,
Arakawa T., Bono H., Carninci P., Fukunishi Y., Furuno M.,
Hanagaki T., Hara A., Hayatuu N., Hiramoto K., Hiraoka T., Hori F.,
Imotani K., Ishii Y., Itoh M., Izawa M., Kagukawa T., Kato H.,
Kawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C.,
Matsuyama T., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M.,
Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sakai K.,
Sano H., Sasaki D., Shibata K., Shibata Y., Shinagawa A., Shiraki T.,
Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T.,
Tejima Y., Toya T., Yamamura T., Yasunishi A., Yoshida K., Yoshino M.,
Muramatsu M., Hayashizaki Y.;
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg·R.;
Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=C57BL/6; TISSUE=Mouse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and mouse cDNA sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE
                               NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Eye;
```

```
VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS------SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                               SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                               SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.

-!- SUBCELLUIAR LOCATION: Integral membrane protein (By similarity).
-!- SIMILARIATY: Belongs to the G-protein coupled receptor 1 family.

EMBL; BT021184; AAX31366.1; -; mRNA.

EMBL; BT021184; AAX3136.1; -; mRNA.

EMBL; BT021184; AAX3136.1; -; mRNA.

EMBL; ST021184; AAX3136.1; -; mRNA.

EMBL; ST021184; AX31316.1; -; mRNA.

GO; GO:001619; F:lysosphingolippid and lysophosphatidic acid . .; IEA.

GO; GO:0004872; F:receptor activity; IEA.

GO; GO:0007186; P:G-protein coupled receptor protein signalin. .; IEA.
                                                                                                                                                                                 73
                                                                                                                                                           14 SSVSDYGNYDIIVRHYNYTGKLNIGAEKDHGIKLTSVVFILLICCFIILENIFVLLTIWKT
                                                                                                                       3 SLYSBYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-WAY-2005 (TrEMBLrel. 30, Created)
10-WAY-2005 (TrEMBLrel. 30, Last sequence update)
10-WAY-2005 (TrEMBLrel. 30, Last annotation update)
Endothelial differentiation, sphingolipid G-protein-coupled receptor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-Pooled;
MEDLINE-21180013; PubMed=11282978; DOI=10.1101/gr.170101;
Smith T.P.L., Grosse W.M., Freking B.A., Roberts A.J., Stone R.T.,
Casa E., Wray J.E., White J., Cho J., Fahrenkrug S.C., Bennett G.L.,
Heaton M.P., Laegreid W.W., Rohrer G.A., Chitko-McKown C.G.,
Pertea G., Holt I., Karamycheva S., Liang F., Quackenbush J.,
Keele J.W.;
Sequence evaluation of four pooled-tissue normalized bovine cDNA
libraries and construction of a gene index for cattle.";
                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T.P.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bos taurus (Bovine).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi,
Mammalia, Eutheria; Laurasiatheria, Cetartiodactyla; Ruminantia;
                                                             14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Harhay G.P., Sonstegard T.S., Van Tassell C.P., Clawson M.L., Heaton M.P., Keele J.W., Snelling W.M., Weidmann R.T., Smith T. "Sequencing and analysis of Bos taurus full-length insert cDNA
   Length 382;
46.7%; Score 845; DB 2; Length 382, 48.4%; Pred. No. 3.3e-49; ive 61; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291 RSRDLRREVLRPLQCWR-PGVGVQGR-RRGGTPGHHLLPLRSSSS 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314 TNKEMRRAFIRIVSCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                382 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pecora; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genome Res. 11:626-630(2001).
   Query Match
Best Local Similarity 48.4%
Matches 167; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QSBIPO BOVIN PRELIMINARY;
QSBIPO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rissum=Pooled;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Name=EDG1;
                                                                                                                                                                                                                                                     62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clones."
                                                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
QSBIP0_BOV
```

```
rch completed: December
time : 153 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    310
                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Search
    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                            ?
                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                            133
                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                              VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS-----SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                      14 SSVSDYVNYDIIVRHYNYTGKLAVSADKENGIKLLSVVPILICCFIILENIFVLLTIWKT
                                                                                                                                                                                                                                                                                                                                             62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                               74 KKFHRPMYYFIGNLALSDLLAGVAYIANLLLSGATTYKLTPAQWFLREGSMFVALSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                       SLAJAIERYITMLKWKLHNGSNRFRSFLLISACWVISLILGGLPIMGWNCISTLPSCST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                       SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A., Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A., Nicala C., Salanoubat M., Levy M., Boudet N., Castellano S., Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B., Piement C., Skalli Z., Cattollo L., Poulain J., De Berardinis V., Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J., Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S., Kellis M., Volff JN., Guigo R., Zody M.C., Mesirov J., Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M., Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-SEP-2005 (TrEMBLrel. 31, Created)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
Chromosome undetermined SCAP7591, whole genome shotgun sequence.
ORNames=GSTENG00004/94001,
Tetraodon nigroviridis (Green puffer).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Buteleostomi,
Actinopterygii, Neopterygii, Teleostei; Buteleostei; Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha; Tetraodontiformes,
Tetradontoidea, Tetraodontidae; Tetraodon.
                                                                                                                                                                                     Transducer; Transmembrane
                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                                Length 382;
                                                                                                                                                                                                                                                           86; Indels
                                                                                      Pfam; PP00001; 7tm 1; 1.

PRINTS; PR01642; EDG1RECEPTOR.

PRINTS; PR01231; GPCRRHODOPSN.

PRINTS; PR01523; S1PRECEPTOR.

PROSITE; PS00237; G PROTEIN RECEP F1 1; 1.

PROSITE; PS50262; G—PROTEIN RECEP F1 2; 1.

G-profein coupled receptor; Receptor; Trans SEQUENCE 382 AA; 42742 MW; 31FCB6164ABB12C6 CRC64;
                                                                                                                                                                                                                            Query Match
Best Local Similarity 50.5%; Pred. No. 3.8e-49;
Matches 159; Conservative 58; Mismatches 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373 AA
GO; GO:0007165; P:eignal transduction; IEA.
InterPro; IPR000927; EGGE-receptor.
InterPro; IPR000277; EGGZ receptor.
InterPro; IPR000276; GPCR_Rhodpsn.
InterPro; PTR004061; SIP_receptor.
PANTHER; PTR19266:SF5; EGGIreceptor; PEGmi, PP00001; 7tm_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314 SNKEMRRAFVRIMSC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 TETNG
Q4T9E2_TETNG PRELIMINARY;
Q4T9E2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                  134
                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                      Б
                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70 NLALSDILAGVVYTANIILLSGANTYKLTPTQWFFREGSMFVALAASVFSLLAIAIERHLT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REVLRPLQC-------WRPGVGVQ-GRRRGGTPGHHLLPLRSSSSLERGMHMPTS- 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.; "Genome duplication in the teleost fish Tetraodon nigroviridis reveals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 ISKHYNYTGKFRKTQEDSGLKADSVVFIIVCCFIILENILVLTTIWRTKKFHKPMYYFIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 NLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194 VVTIFSIILLAVVALYVRIYCVVR------SSHADMAAPQTLALLKTVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 IAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       237 IVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 VQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLG
                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE.

Genoscope; Whitehead Institute Centre for Genome Research;
Genoscope; Whitehead Institute Centre for Genoscope;
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
-!- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2, Length 373;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46.5%; Score 841; DB 2; Length 3747.0%; Pred. No. 6e-49; ive 54; Mismatches 104; Indels
                                                                                                                                                                                                                                                                                                                                                                                                       PRINTS; PRO0613 TEM 1.

PRINTS; PRO0642; EDGIRECEPTOR.

PRINTS; PRO0231; GPCRHODOPSN.

PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.

PROSITE; PS50262; GPROTEIN RECEP F1 2; 1.

G-protein coupled receptor; Receptor; Trans ESEQUENCE 373 AA; 41706 MW; CE779CA9B3D371EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4, 2005, 06:52:04
                                               the early vertebrate proto-karyotype.";
Nature 431:946-957(2004).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3est_Local Similarity 47.0%
4atches 174; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344 PTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   362 RIASSGNVTL
                                                                                                 [2]
NUCLEOTIDE
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

December 4, 2005, 06:38:17; Search time 24.5 Seconds (without alignments) 1386.307 Million cell updates/sec Run on:

US-10-084-507B-22 1809 1 MGSLYSEYLNPNKVQEHYNY......LERGWHMPTSPTFLEGNTVV 353 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 80:*
1: pir1:*
2: pir2:*
3: pir3:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES	DB I	!	2 I53870 Edg-1 orpha	G protein-co	2 JC7559 BP	2 E48909	2 JC5245 G	2 JC5293 ly	2 S43850	2 B46647 me	2 I65990 G	2 A55689 G	2 S48697 pr	2 \$36636 melanocorti	2 S40454 G protein-cou	2 JC2193	2 I49008	2 S71420	2 A33117	2 A57055 melanocortin	~	2 JN0764	2 S70364 cannabinoid rec	2 S45708	2 S70005	2 817595	7	T12055	·
	Length	352	383	381	362	180	378	364	323	360	362	330	363	323	330	325	372	314	473	332	325	325	347	317	314	472	315	317	412
مان	Query Match 1	89.9	ė.	9	s.		6	ω.	19.5	٥.	19.2	ď.	8	18.7	18.6	16.9	ė.	16.7	16.6	è.	ė,	16.1	ė.	9	'n.	'n	'n.	15.7	u
	Score	1625.5	847	836.5	817.5	808	769	206	S	348.5	348	345	m	338.5	336	305	302	301.5	300	299.5	295.5	291.5	290.5	290	288.5	286	285	284.5	2 44 5
	Result No.	-	7	m	4	'n	φ	7	80	o	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

adenosine receptor	G protein-coupled	A2 adenosine recep	melanotropin recep	melanocyte-stimula	adrenocorticotropi	adrenocorticotropi	alpha-1A-adrenergi	alpha-1A-adrenergi	G protein-coupled	alpha-1-adrenergic	alpha-1A adrenergi	adrenocorticotropi	adenosine A2a rece	5-HT4S receptor -	serotonin 4 recept
A48974	S18444	I48095	S29204	146416	152326	JC4046	JH0447	139369	D30341	A40491	A38731	C43265	S68247	855550	S55549
~	~	~	~	~	~	7	7	7	~	7	7	7	~	~	7
410	320	409	317	325	296	296	501	572	412	515	260	297	409	387	406
9.9	15.5	15.5	15.3	15.2	15.0	15.0	15.0	15.0	15.0	14.8	14.5	14.5	14.3	14.1	14.1
ä			7	S	2	71	271	271	.5	267	263	5	'n	255	255
282	280.5	279.5	27	275.5	27	7	7	~	270.5	N	7	261.5	258.5	~	7

ALIGNMENTS

 RESULT 1	
 probable G pro C;Species: Rai C;Date: 30-Sej	probable G protein-coupled receptor - rat C;Species: Rattus norvegicus (Norway rat) C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
 C; Accession: - R; Okazaki, H.	J1465 ; Ishizaka, N.; Sakurai, T.; Kurokawa, K.; Goto, K.; Kumada, M.; Takuwa, Y bos Commiss 100 1104-1100 1903
 A;Title: Mole	blochem: blophyb. Res. Commun. 150, 110-1105, 1553. A;Title: Molecular cloning of a novel putative G protein-coupled receptor expressed in t A:Reference number: JC1465: MIID:93176155; PMID:8382486
A; Accession: JC1465 A; Molecule type: mRNA	JC1465 pe: mRNA
 A; Residues: 1-352 < OKA>	A;Residues: 1-352 <oka> A.crosa.references: INTPROT:P47752: UNIPARC:UPI000000001D: GB:AB016931: NID:G3445557: PI</oka>
 A; Experimenta	1 source: aortic smooth muscle
C; Keywords: G	C; Superramily: G procein-coupled receptor eng-1
F:67-95/Domai	n: transmembrane #status predicted <1M1> n: transmembrane #status predicted <1M2>
 F;110-128/Dom	ain: transmembrane #status predicted <tm3></tm3>
 F;148-173/DOm F;190-210/Dom	ain: transmembrane #status predicted <im4> ain: transmembrane #status predicted <tm5></tm5></im4>
F; 234-255/Dom	ain: transmembrane #status predicted <tm6></tm6>
F;2/2-293/DOM F;19/Binding	
 F;142,145,218 F;313/Binding	
 Query Match Best Local Matches 31	Query Match Best Local Similarity 89.5%; Pred. No. 6.3e-125; Matches 316; Conservative 14; Mismatches 22; Indels 1; Gaps 1;
 0,	DETTSROVASAFI
Db 1	
 Qy 61	NSKEHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
Db 61	NSKEHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
Oy 121	
 Db 121	FSLLAIAIERQVAIAKVKLYGSDKSCRMLML
Qy 181	TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
 Db 181	
 Qy 241	VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
 Db 241	VFIICWLPAFSILLIDSTCPVRACPVLYKAHYFFFAFATLNSLLNPVIYTWRSRDLRREVL 300

2

Gaps

11;

Indels

----APQTLAL 231

```
sphingosine 1-phosphate receptor - zebra fish
N;Alternate names: endothelial differentiation gene 1 receptor
C;Species Brachydanio rerio (zebra fish)
C;Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 09-Jul-2004
C;Accession: JC7559
R;Im, D.S.; Ungar, A.R.; Lynch, K.R.
Biochem. Biophys Res. Comwun. 279, 139-143, 2000
A;Title: Characterization of a zebrafish (Danio rerio) sphingosine 1-phosphate receptor
A;Reference number: JC7559; MUID: 20563813; PMID:11112429
                                                                                                                                                                                                                                                 74 KKFHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVF 133
                                                                                                                                                                                                                                                                                                                                                                      SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                                                                                   SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWR 291
                                                                                                                        SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                               VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMA---
No. 1.2e-60;
smatches 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45.2%; Score 817.5; DB 3 45.4%; Pred. No. 3.9e-59
                            60; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      194 VVTIFSIILLAVVALYVRIYCVVRSSH---
   Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 45.2%;
Matches 161; Conservative 6
49.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292 SRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   314 NKEMRRAFIRIMSC 327
                            Conservative
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: JC7559
                                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                                                                   134
                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Genetics
                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                        ð
                                                                                                                                           셤
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                      dive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A35300

G protein-coupled receptor edg-1 - human

C;Species: Homo sapiens (man)

C;Species: 12-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 09-Jul-2004

C;Accession: A35300

R;Hla, T.: Maciag, T.

J. Baiol. Chem. 265, 9308-9313, 1990

A;Title: An abundant transcript induced in differentiating human endothelial cells encoc

A;Reference number: A35300, MUID:90264425; PMID:2160972

A;Residues: 1-381 cHLA>

A;Residues: 1-381 cHLA>

A;Residues: 1-381 cHLA>

A;Cross-references: UNIPROT:P21453; UNIPARC:UPI0000037801; GB:M31210; NID:g181948; PIDN:

C;Genetics:

A;Gene of Bs:EGGF1

A;Cross-references: GDB:127754; OMIM:131222

A;Map position: 22q13-22q13

C;Superfamily: G protein-coupled receptor edg-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PIDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cross-references: UNIPROT:P48303; UNIPARC:UP10000129BD0; EMBL:U10303; NID:g595396; Superfamily: G protein-coupled receptor edg-1
                                                                                                                                                                                                                                                                                                                                                                                                   expression pattern suggests
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transmembrane
                                                                                                                                                                     LGSULI 2

Cispecials: Rattus norvegicus (Norway rat)

Cidacession: 153870

Rilado, D.C.; Browe, C.S.; Gaskin, A.A.; Borden, J.M.; MacLennan, A.J.

Gene 149, 311-336, 1994

A;Title: Cloning of the rat edg-1 immediate-early gene: expression pattern sugges

A;Reference number: 153870; MUID:95047498; PMID:7959012

A;Reference number: 153870; MUID:95047498; PMID:7959012

A;Restus: preliminary; translated from GB/EMBL/DDBJ

A;Residus: preliminary;

A;Molecule type: mRNA

A;Residus: 1-383 - RESA

A;Coss-references: UNIPROY:P48303; UNIPARC:UPI0000129BD0; EMBL:U10303; NID:95995

C;Superfamily: G protein-coupled receptor edg-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRS-----SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LIKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KKFHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | |:| |: ||||| | : :: | |:| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |::|| |:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                  RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46.2%; Score 836.5; DB 2; Length 381;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48.4%; Pred. No. 1.05-01;
tive 61; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THEMREAFIRIISCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RSRDLRREVLRPLQCWR-PGVGVQGR-RRGGTPGHHLLPLRSSSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46.8%; Score 847; DB 2; 48.4%; Pred. No. 1.6e-61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similairy
Matches 167; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      က
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           291
301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
A, Residues: 1-362 <IMA>, A, A, COSB-A-EFERONDES: UNIPARC:UPI00001788F3; GB:AF321294
C, COMMENT: This receptor, a G protein-coupled receptor, mediates sphingosine 1-phosphate or also functions in the developing central nervous system in cell proliferation, apopto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 VEIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          245 CFIACWAPLFILLILIDVACQTLTCSILYKAEWFLALAVINSAMNPLIYTLTSNEMRRAFI 304
                                                                                                                                                                                                                                                                                                                                                                                                                             74 NLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                          134 IAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLC 193
                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                            64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --ADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                             14 VQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLG
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                              21;
                                                                                                                                                                                                                          Length 362;
                                                                                                                                                                                                                                                                           Indels
                                                                                                                            A,Gene: edg1
C,Superfamily: G protein-coupled receptor edg-1
C,Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                           64; Mismatches 109;
                                                                                                                                                                                                                             DB 2;
```

```
a functic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:Q92633; UNIPARC:UP10000050403; GB:U80811; NID:g1857424; PID:
C;Superfamily: G protein-coupled receptor edg-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                271 WTPGLVLLLLDVCCP--QCDVLAYEKFFLLLAEFNSAMNPIIYSYRDKEMSATFRQILCC 328
                                                                                                                               252
                                                                                                                                                                              243 IVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVLRP 302
                                                                                                                                                                                                      93
                                                                                                                                                                                                                                                                                                                                                                                                                   Nysophosphatidic acid receptor - human
Nysophosphatidic acid receptor - human
Nylternate names: Edg2 protein
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens
C;Accession: JC5293
R;An, S.; Dickens, M.A.; Bleu, T.; Hallmark, O.G.; Goetzl, E.J.
Biochem: Biophys. Res. Commun. 231, 619-622, 1997
A;Title: Molecular cloning of the human Edg2 protein and its identification
A;Contents: lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         melanocortin 3 receptor - mouse
C;Species: Mus musculus (house mouse)
C;Dacies 7-Jan-1995 #sequence_revision 27-Jan-1995 #text_change 09-Jul-2004
C;Accession: S43850; S37153
R;Desarnaud, F.; Labbe, O.; Eggerickx, D.; Vassart, G.; Parmentier, M.
                       34 YNRSGKHLATEWNTVSKLVMGLGITVCIFIMLANLLVWVAIYVNRRFHFPIYYLMANLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246 WLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC
                                                                                       AKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMA----APQTLALLKTVTIVLGVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FSIILLAV-VALYVRIYCVVR-----SSHADMAAPQ-----TLALLKTVTIVLGVFIVC
18 YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28.0%; Score 506; DB 2; Length 36 34.6%; Pred. No. 9.1e-34; rive 69; Mismatches 122; Indels
                                                                                                                                                                                                                                                                                                      LQCWRPGVGVQGRRRGGTPGHHLL-PLRS-SSSLERGMHMP 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  306 WRPGVGVQGRRRGGTPGHHLLPLRSSSSLER----GMH 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QR----SENPTGPTESSD----RSASSLNHTILAGVH 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Accession: JC5293
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Residues: 1-364 <ANA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
                                          133
                                                                                       187
                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                     312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
127
                                                                                                                                                                                                                                                                          303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
S43850
Š
                              셤
                                                                                       ઠે
                                                                                                                          a
                                                                                                                                                                              ઠે
                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gprotein-coupled receptor - human
C;Species: Homo sapiens (man)
C;Accession: JG5245
R;Yamaguchi, F.; Tokuda, M.; Hatase, O.; Brenner, S.
Bjochem: Biophys. Res. Commun. 227, 680-644, 1996
A;Tille: Molecular cloning of the novel human G protein-coupled receptor (GPCR) gene map
A;Reference number: JG5245; MUID:97032811; PMID:8878560
A;Rille: Molecule type: DNA
A;Residues: 1-378 c/YAM>
A;Conserreferences: UNIPROT:Q99500; UNIPARC:UPI0000050422; EMBL:X83864; NID:g1770395; PI
C;Comment: This protein transduces hormone and neurotransmitter signals into intracellul
C;Genetics:
A;Gene: edg-1
A;Map position: 9q22.1-q22.2
C;Superfamily: G protein-coupled receptor
C;Keywords: G protein-coupled receptor
                                                                                                                                               G protein-coupled receptor Gpcr13 - mouse (fragment)
G protein-coupled receptor Gpcr13 - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Accession: E48909
R;Wilkie, T.M.; Chen, Y.; Gilbert, D.J.; Moore, K.J.; Yu, L.; Simon, M.I.; Copeland, N.G
GGnomics 18, 175-184, 1993
A;Title: Identification, chromosomal location, and genome organization of mammalian G-pr
A;Reference number: A48909; MUD:94116980; PMID:8288218
A;Accession: B48909
A;Accession: B48909
A;Accession: B48909
A;Accession: B48909
A;Accession: B48909
A;Residues: 1-180 < WIL.>
A;Residues: 1-180 < WIL.>
A;Cross-references: UNIPROT:P52592; UNIPARC:UP10000029470; GB:L20334; NID:9438786; PIDN:C;Superfamily: G protein-coupled receptor
C;Superfamily: G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 SILAIAIERQVALAKVKLYGSDKSCRMLMLIGASWLISLILGGGLSIIGWNCLNKLEACST 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 AMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAI 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLGV 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGHVTLSLTPVQWFAREVSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 VQEHYNYT-----KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RMYFFIGNLALCDLLAGIAYKVNILMSGKKTFSLSPTVWFLREGSMFVALGASTCSLLAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
  353
                            305 KMLNC---GVCVQPSGKPSRP---IMGAEFSTSKSDNSSHPNKDEPEYSPRETIV 353
  RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPT--SPTFLEGNTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42.5%; Score 769; DB 2; Length 37
47.2%; Pred. No. 3.6e-55;
ive 57; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 808; DB 2;
Pred. No. 1.2e-58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 91.1%;
Matches 164; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73
301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

셤 ò g ò 셤 ð 셤 à g

```
ASSESS Description of the protein coupled receptor GPR3; orphan G-protein-coupled receptor AC G protein-coupled receptor AC C; Species: Homo saplens (man)
C; Species: Homo saplens (man)
C; Date: 03-Mar-1995 #sequence revision 03-Mar-1995 #text_change 09-Jul-2004
C; Accession: A55689; SS821; C55733
R; Iismaa, T.P.; Kiefer, J.; Liu, M.L.; Baker, E.; Sutherland, G.R.; Shine, J. Genomics 24, 391-394, 1994
A; Title: Isolation and chromosomal localization of a novel human G-protein-coupled receptor A; Reference number: A55689; MUD: 95213036; PMID: 7698767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A,Cross-references: UNIPROT:P46095; UNIPARC:UP1000000DA4A; GB:L36150; NID:g598156; PIDN:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R.; Heng, H.H.Q.; Marchese,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G protein-coupled receptor 6 - human C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Accession: 165996 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C; Accession: 165990 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C; Accession: 165990 #sequence_revision 0.5 Naile: 1955
DNA 6cl Balol. 14, 25-35, 1955
A; Title: Isolation of three novel human genes encoding G protein-coupled receptors. A; Title: Isolation of three novel human genes encoding G protein-coupled receptors. A; Title: Isolation of three novel human genes encoding G protein-coupled receptors. A; Steference number: I53033; MUID:95134353; PMID:7832990
A; Steference number: I53033; MUID:95134353; PMID:7832990
A; Steference number: 153033; PMID:783290
                                                                                                                                         296
                                                                                                                                                                    287 VFIFCWAPFFLHLVLIITCPTNPYCTCYTAHFNTYLVLIMCNSVIDPLIYAFRSLELRNT 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95 SVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS-CRMLLLIG 153
                                         241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHY--LFAVSTLNSLLNPVIYTWRSRDLR--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 VILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTL---LSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        154 ASWLISLVIGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLAVVALYVRIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           214 CVVRSSHAD------MAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDYACPV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262 -HSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREV-LRPLQCWRPGVGVGR 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
19.2%; Score 348; DB 2; Length 36
Best Local Similarity 34.1%; Pred. No. 6.6e-21;
Matches 101; Conservative 53; Mismatches 106; Indels
      LCVVTIFSIILLAVVALYVRIYCVVR---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A,Gene: GDB:GPR6
A,Cross-references: GDB:371713; OMIM:600553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Map position: 6q21-6q21
C; Superfamily: melanocortin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary
A;Molecule type: DNA; mRNA
                                                                                                                                                                                                                                                                        -REVL 300
                                                                                                                                                                                                                                                                                                                                      347 FREIL 351
      192
                                                                                                                                                                                                                                                                        297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                   g
                                                                                                                                     ð
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
      ò
                                                                                                                                                                                                                                         PIL
Biochem. J. 299, 367-373, 1994

A;Title: Molecular cloning, functional expression and pharmacological characterization A;Reference number: S43850; MUID:94226597; PMID:8172596
A;Accession: S43850
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-323 < ADES>
A;Cross-references: UNIPROT:P33033; UNIPARC:UPI0000004010; EMBL:X74983; NID:g400473; PIC;Superfamily: melanocortin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9

B46647

melanocortin receptor 3 - human
c;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 22-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 04-Sep-1998
C;Accession: B46647; Millory T.; Shimoto, Y.; Miwa, H.; Munzert, G.; Watson, J. Biol. Chem. 268, 8246-8250, 1993
A;Title: Molecular cloning of a novel melanocortin receptor.
A;Reference number: A46647; MUID:93216807; PMID:8463333
A;Accession: B46647
A;Scatus: preliminary; not compared with conceptual translation
A;Residues: 1-360 cGNN>
A;Residues: 1-360 cGNN>
A;Residues: 1-360 cGNN>
A;Residues: GDB:MCSP
A;Across-references: UNIPARC;UPI00001789CB
A;Mote: sequence extracted from NCBI backbone (NCBIP:129161)
C;Genetics:
A;Gene: GDB:MCSP
A;Cross-references: GDB:138780
A;Cross-references: GDB:138780
A;Cross-references: GDB:133780
A;Cross-references: GDB:133780
A;Map position: 20q13.2-20q13.3
C;Superfamily: melanocortin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T.; Shimoto, Y.; Miwa, H.; Munzert, G.; Watson,
                                                                                                                                                                                                                                                                                                                                                                                                           11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64 SNQSSSAFCEQVFIKPEIFLSLGIVSLLENILVILAVVRNGNLHSPMYFFLCSLAVADML 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FYALRYHSIMTVRKALTLIVAIWV------CCG---VCGVVFIVYSESKWVI 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VFLALGIVSLMENILVILAVVRNGNLHSPMYFFLCSLAAADMLVSLSNSLETIMIAVINS 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GSVTLRLTPVQWFAR--EGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKSCR-MLL 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YVRIYCVVR-----SSHADMAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDY 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135 AKVKLYGSDKSCR-MLLLIGASWLISLVLGGLPILGWNCLGHLRACSTVLPLY--AKHYV 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41 VILCCAIV -- VENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLL----S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLY--AKHYVLCVVTIFSIILLAVVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32 SRQVASAFI-----VILCCAIV--VENLLVLIAVARNSKFHSAMYLFLGNLAASDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGVAFVANTLL----SGSVTLRLTPVQWFAR--EGSAFITLSASVFSLLAIAIERHVAI
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              267 TCPTNPYCICYTAHFNTYLVLIMCNSVIDPLIYAFRSLELRNTFKEIL 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACPVHSCPILYKAHY--LFAVSTLNSLLNPVIYTWRSRDLR---REVL 300
                                                                                                                                                                                                                                                                                                                                         Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 360;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 19.3%; Score 348.5; DB 2; Length 3 Best Local Similarity 33.4%; Pred. No. 6e-21; Matches 102; Conservative 49; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                    93; Indels
                                                                                                                                                                                                                                                                                                                                      19.5%; Score 352.5; DB 2; 34.0%; Pred. No. 2.5e-21; ive 52; Mismatches 93;
                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 34.0%
les 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
```

ò 요 ઠે g ð 셤

```
S40454
G protein-coupled receptor GPCR21 - mouse
C;Species: Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      melanocortin receptor 3 - rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 95; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        208
                                                                                                                                                                                                                                                                                                                                                                                                                             263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259
                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     268
                                                                                                                                95
                                                                                                                                                                                                                                                                                                                             214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                         g
                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                ઠે
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                   ઠે
A; Residues: 1-330 <115>
A; Cross-references: UNIPROT: P46089; UNIPARC: UPI000001624; GB: L32830; GB: L32831; NID: 960
R; Eggerickx, D: Denef, J: Labbe, O: Hayashi, Y: Refetoff, S:; Vassart, G: Parment
Biochem. J. 309, 837-843, 1995
A; Title: Molecular cloning of an orphan G-protein-coupled receptor that constitutively a
A; Reference number: SS821; MUID: 95366960; PMID: 7639700
A; Reference number: SS8221
A; Reference silon: SS8221
A; Reference number: SS8221, MUID: 95366960; PMID: 7639700
A; Residues: 1-330 < kGGA
A; Residues: 1-330 < kGGA
A; Residues: 1.330 < kGGA
A; Residues: UNIPARC: UPI000001624; GB: KB3956; NID: Global; R: Heng, H.H.Q.; Tsui, I
Genomics 23, 609-618, 1994
A; Residues: 1.500
A; Residues: A: Docherty, J.M.; Nguyen, T:; Heiber, M.; Cheng, R.; Heng, H.H.Q.; Tsui, I
Genomics 23, 609-618, 1994
A; Residues: 1.592 < kMR>
A; Residues: 1.292 < kMR>
A; Gene: GBB: GFR3
A; Gene: GBB: GFR3
A; Gene: GBB: 371695; OMIM: 600241
A; Map position: 1p36. 1-1p34.3
C; Superfamily: melanocortin receptor
C; Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   probable G protein-coupled receptor protein - rat
C;Species: Rattus norregicus (Norway rat)
C;Species: Rattus norregicus (Norway rat)
C;Species: Rattus norregicus (Norway rat)
C;Accession: $48697
R;Song, Z.H.; Young III, W.S.; Brownstein, M.J.; Bonner, T.I.
R;Song, Z.H.; Young III, W.S.; Brownstein, M.J.; Bonner, T.I.
A;Tit.le: Molecular cloning of a novel candidate G protein-coupled receptor from rat brai
A;Reference number: $48697; MUID:94364507; PMID:8082799
A;Accession: $48697
A;Cross-references: UNIPROT:P51651; UNIPARC:UP1000012BA34; EMBL:U12006; NID:g551333; PIC
C;Superfamily: melanocortin receptor
C;Keywords: G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      42 AWDVVLCISGTLVSCENALVVAIIVGTPAFRAPMFLLVGSLAVADLLAGLGLVLHFAAVF 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS-CRMLL 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CIGSAEMSLVLV-----GVLAMAFTASIGSLLAITVDRYLSLYNALTYYSETTVTRTYV 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSI--ILLAVVAL 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                216 ICRIVC----RHAQQIALQRHLLPASHYVATRKGIATLAVVLGAFAACWLPFTVYCLLGD 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YVRIYCVVRSSHADMAAPQTLAL------LKTVTIVLGVFIVCWLPAFSILLLDY 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38 AFIVILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFV---ANTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A---HS-PPLY-TYLTLLPATYNSMINPIIXAFRNQDVQK-VLWAVCC 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 363;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 330;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 19.1%; Score 345; DB 2; Length 33(Best Local Similarity 33.3%; Pred. No. 1.1e-20; Matches 96; Conservative 49; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
18.8%; Score 339.5; DB 2;
Best Local Similarity 34.7%; Pred. No. 3.3e-20;
Matches 96; Conservative 51; Mismatches 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

12;

Gaps

35;

Indels

```
C;Species Rattus norvegicus (Norway rat)
C;Species Rattus norvegicus (Norway rat)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: A48254; 836636
R;Roselli-Rehfuss, L.; Mountjoy, K.G.; Robbins, L.S.; Mortrud, M.T.; Low, M.J.; Tatro, J. R;Roselli-Rehfuss, L.; Mountjoy, K.G.; Robbins, L.S.; Mortrud, M.T.; Low, M.J.; Tatro, J. A;Title: Identification of a receptor for gamma melanotropin and other proopiomelanocort A;Reference number: A48254; MUID:94022273; PMID:8415620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-323 <ROS>
A;Residues: 1-323 <ROS>
A;Residues: 1-323 <ROS>
A;Cross-references: UNIPROT:P32244; UNIPARC:UPI000012ED4C; EMBL:X70667; NID:g396551; PID
A;Note: submitted to the EMBL Data Library, January 1993
A;Note: in Genbank entry RRMC3RA, release 113.0, the source is designated as Rattus ratt
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        207
                               |:|| : || || || || : :|
78 VILCVSGTVIAGENALVVALIASTPALRTPMFVLVGSLATADLLAGGGLILHFVEQYVVP 137
                                                                                                                                                                     213
                                                                                                                                                                                                                                                                                                           CVVRSSHAD-----MAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDYACPVH 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                 250 CQVVWRHAHQIALQQHCLAPPHLAATRKGVGTLAVVLGTFGASWLP-FAIY-----CVVG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       44 VFLALGIVSLMENILVILAVVRNGNLHSPMYFFLLSLLQADMLVSLSNSLETIMIVVINS 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94 GSVTLRLTPVQWFAR--EGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKSCRMLLL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VRIYCVVR-----SSHADMAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDYA 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IHMFLFARLHVQRIAALPPADGVAPQQHSCMKGAVTITILLGVFIFCWAPPFLHLVLIIT 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93
94
VILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLS---G
                                                                                                                                  SVILRLIPVQWFAREGSAFITLSASVFSLLAIAIBRHVAIAKVKLYGSDKS-CRMLLLIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            154 ASWLISLVIGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLAVVALYVRIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 VILCCAIV--VENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLL----S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         152 IGASWLISLVLGGLPILGWNCLGHLEACSTVLPLY--AKHYVLCVVTIFSIILLAVVALY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CPVHSCPILYKAHY--LFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQCWRPGVGV 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CPTNPYCICYTAHFNTYLVLIMCNSVIDPLIYAFRSLEL-RNTFKEILCGCNGMNV 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Gene: MC3-R
C;Superfamily: melanocortin receptor
C;Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S--CPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRR 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18.7%; Score 338.5; DB 2;
llarity 32.1%; Pred. No. 3.5e-20;
Conservative 56; Mismatches 104;
```

```
completed: December
ne : 25.5 secs
                                                                                                                                                                                                                                                                                                183
                                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search co
                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                     g
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                              ₹
                                                                                                                                                                                                                          ઠ્ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
JC2193
melanocortin receptor, MC5 - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change 09-Ju1-2004
R;Gilffon, N.; Mignon, V.; Facchinetti, P.; Diaz, J.; Schwartz, J.C.; Sokoloff, P.
Biochem. Biophys Res. Commun. 200, 1007-1014, 1994
A;Reference number: JC2193; MUD1:94234987; PMID:8179577
A;Accession: JC2193
A;Molecule type: DNA
A;Residues: 1-325 <GRI>
A;Molecule type: DNA
A;Residues: 1-325 <GRI>
A;Molecule type: DNA
A;Residues: 1-325 <GRI>
A;Cross-references: UNIPROT:P35345; UNIPARC:UP1000012ED53; GB:L27081; NID:94335606; PIDN:
C;Superfamily: melanocortin receptor
C;Keywords: G protein-coupled receptor; receptor; transmembrane #status predicted <TM2>
F;73-98/Domain: transmembrane #status predicted <TM3>
F;139-11/Domain: transmembrane #status predicted <TM3>
F;139-211/Domain: transmembrane #status predicted <TM4>
F;240-263/Domain: transmembrane #status predicted <TM5>
F;276-297/Domain: transmembra
C;Date: 19-May-1994 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C;Accession: $40454
R;Saeki, Y.; Ueno, S.; Mizuno, R.; Nishimura, T.; Fujimura, H.; Nagai, Y.; Yanagihara, T
FEBS Lett. 336, 317-322, 1993
A;Title: Molecular cloning of a novel putative G protein-coupled receptor (GPCR21) which
A;Reference number: $40454
A;Reference number: $40454
A;Status: preliminary
A;Molecular preliminary
A;Molecule type: mRNA
A;Residues: 1-330 <SAE>
A;Residues: 1-330 <SAE>
A;Cross-references: UNIRROT:PB35413; UNIPARC:UPI0000025C17; GB:D21062; NID:g455487; PIDN: C;Superfamily: melanocortin receptor; phosphoprotein; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77 ASDLLAGVAFVANTLL-----SGSVTLRLTPVQWFAREGSAFITLS--ASVFSLLAIAIE 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42 AWDVVLCISGILVSCENALVVAIIVGTPAPRAPMFLLVGSLAVADLLAGLGLVLHFAADF 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92 LSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIARHVAIAKVKLYGSDKS-CRMLL 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                151 LIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSI--ILLAVVAL 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         209 YVRIYCVVRSSHADMAAPQTLAL-----LKTVTIVLGVFIVCWLPAFSILLLDY 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               216 ICRIVĊ----RHAQQIALQRHLLPASHYVATRKGIATLAVVLGAFAACWLPFTVYCLLGD 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 NYTKETLETQETTSRQVASAFIVILCCAIV--VENLLVLIAVARNSKFHSAMYLFLGNLA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 NILGONVNNKSSACEDMGIAVEVFLTLGLVSLLENILVIGAIVKNLHSPMYFFVGSLA 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38 AFIVILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFV---ANTL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            th 16.9%; Score 305; DB 2; Length 325; Similarity 27.7%; Pred. No. 1.9e-17; 86; Conservative 71; Mismatches 112; Indels 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 18.6%; Score 336; DB 2; Length 330;
1 Similarity 32.3%; Pred. No. 5.7e-20;
93; Conservative 50; Mismatches 109; Indels 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A----DSPRLY-TYLTLLPATYNSMINPVIYAFRNQDVQK-VLWAICC 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258 ACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ્ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
```

4, 2005, 06:52:58

٧,

```
4, 2005, 06:24:31; Search time 130 Seconds
(without alignments)
1193.082 Million cell updates/sec
                                                                                                                                                                              US-10-084-507B-22
1809
1 MGSLYSEYINPNKVQEHYNY......LERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                               2443163
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                           2443163 segs, 439378781 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                       OM protein - protein search, using sw model
                                                                                                                                                                                                                                                        BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 geneseqp2000s:*
geneseqp2001s:*
geneseqp2002s:*
geneseqp2003s:*
geneseqp2003bs:*
geneseqp2004s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               geneseqp1980s:*
geneseqp1990s:*
                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A Geneseq 21:*
1: qenesem100
                 Copyright
                                                                                                          December
                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database :
                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                          Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	B BDG-4 Human Huma	Add11249 Human EDG Adu92079 Human end Aab03966 Murine ED Aar58712 Fragment Aaw01663 p(H218), Aay05492 Human EDG
SUMMARIES	AAY28289 AAY38288 AAY38288 AAY38288 AAY38288 AABP59285 ABB6964 ABB68013 ABB62010 AD040485 AD011247 AD059760 AD057293 AD057293 AD0572422 AD057422 AD088359 AAY49905	ADD11249 ADU03079 AAB03966 AARS8712 AAW01663
98	777777777777777777777777777777777777777	r 0 W 0 0 0 0
Length		352 352 352 352 352
% Query Match	000000000000000000000000000000000000000	98.0 97.0 89.0 89.0 89.0 89.0
Score	1809 1809 1803 1803 1787 1787 1787 1787 1787 1787 1787 178	1783 1755 1631.5 1625.5 1625.5
Result No.	1 2 2 4 2 9 8 4 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19 20 23 23 4

Aaw87790 Rat H218,	Aau00305 LPA recep	Rat	Abb98696 Rat Endot	Huma	_	Add48927 Rat Prote	Abb98695 Murine En	Ado29294 Mouse GPC	Adp29509 Human sec	Abp59289 Chimeric	Adg15135 Human 7 t	Aam96680 Human rep	Abb96585 Human tes	•	_	•	Abp59279 Chimeric	Abg75679 Human Edg		Adx44606 Chimeric
AAW87790	AAU00305	ABU07712	ABB98696	ABU61816	ADP88361	ADD48927	ABB98695	AD029294	ADP29509	ABP59289	ADG15135	AAM96680	ABB96585	ADG15162	ABP59281	ABP59280	ABP59279	ABG75679	AD028787	ADX44606
32 2						53 7		_	377 8	72 6	•	74 4	74 4	74 4		34 6				52 9
35	33	35	33	33	33	3.	35	35		~		_	_	_	ĕ	ě	3		ñ	ñ
89.	89.	89.	89.	89.	89.	89.	89	89	83.4	79.	25	52.	52.	52.	47.6	47.	47.4	47.	47.	47.
1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1622.5	1622.5	1509.5	1432	946	946	946	946	860.5	858.5	858	854.5	854.5	854.5
25	56	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

EDG-4; polypeptide; receptor; inflammation; amino acid; G protein; lysolipid; immune response. Gupta AK; EDG-4 amino acid sequence encoded by clone pC3-hEDG4#36. Vyas TB, Kooshesh F, (ALLX) ALLELIX BIOPHARMACEUTICALS INC. AAY28289 standard; protein; 353 AA Peters D, 97US-0070185P. 98US-0080610P. 98US-0109885P. 98WO-CA001195. 12-OCT-1999 (first entry) Кашьој R, WPI; 1999-430392/36. Homo sapiens W09935259-A1 30-DEC-1998; 30-DEC-1997; 03-APR-1998; 25-NOV-1998; 15-JUL-1999. ğ AAY28289; Munroe AAY28289

New isolated lysolipid/EDG receptor useful in the treatment of asthma and rheumatoid arthritis.

Claim 7; Fig 16B; 120pp; English.

A novel isolated lysolipid (LL) receptor/EDG receptor (EDG-4). The LL/EDG receptors are involved in an inflammatory response signaling pathway and an apoptotic signaling pathway. They can be used for identifying sgonists or antagonists of NF-kB or IL-8 modulated EDG or LL receptors. Agonists can be used for upregulation of an inflammatory process condition or immune response. Antagonists can be used for the downregulation of an inflammatory process condition or immune response. The agonists and antagonists can also be used for controlling apoptosis in a cell comprising the LL/EDG receptor. A diagnostic test for aberrant early conditions of HEDG-4 can accelerate diagnosis and proper treatment of abnormal conditions of e.g. the heart, kidney, lung and testis. Specific examples

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
          include adult respiratory discress, acthma, rheumatoid arthritis, stroke, neurotrauma, Alzheimer's disease, endotoxic shock, atheroselerosis, cardiac ischemia, acute pancreatitis, septic shock, psoriasis, acute cyclosporine nephrotoxicity, HIV/AIDS, myelodysplasia, cirrhosis of the liver, and early diabetic glomerulopathy, as well as lung damage following exposure to cigarette smoke, asbestos or silica. HEDG-4 specific antibodies, inhibitors, ligands or their analogs can be used as bioactive agents to treat inflammation or disease including viral, bacterial or fungal infections, allergic responses, mechanical injury associated with trauma, hereditary diseases, lumphoma or carcinoma, or other conditions which activate the genes of kidney, lung, heart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; EDG family; H218; transmembrane receptor protein; diagnosis; therapy; bacterial; fungal; viral; infection; HIV; cancer; diabetes; obesity; anorexia; bulimia; asthma; Parkinson's disease; hypotension; acute heart failure; hypertension; virulary retention; osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer; asthma; allergy; benign prostatic hypertrophy; migraine; vomiting; psychotic; neurological disorder; dyskinesia.
                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAPIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                      61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                  0; Gaps
conditions in which aberrant expression of HEDG-4 may play a role
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 RPLQCWRPGVGVQGRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                Length 353;
                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                              100.0%; Score 1809; DB 2;
100.0%; Pred. No. 5.1e-177;
ive 0; Mismatches 0;
                                                                                                                                                                                                            lymphoid or tissues of the nervous system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY49904 standard; protein; 353 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human EDG family H218 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0082776P.
98US-00150650.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US008099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 353; Conservative
                                                                                                                                                                                                                                              Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9954351-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-APR-1998;
03-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY49904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY49904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8888888888888888888
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
The present sequence is a human EDG family protein designated H218. H218

is used for diagnosing disease or its susceptibility in a subject related
with expression or activity of H218 by determining the presence or
absence of mutation in the polynucleotide encoding H218 in the genome of
the subject and/or analysing for the presence of H218 expression in
sample derived from the subject. It is also used for treating subjects in
need of enhanced activity or inhibition of H218 by administering an
agonist or antagonist respectively. H218 can be used to treat abnormal
conditions such as bacterial, fungal and viral infections, particularly
H1V-1 or 2, cancers, diabetes, obesity, anorexia, bullimia, asthma,
Parkinson's disease, acute heart failure, hypotension, hypertension,
curinary retention, osteoporosis, angina pectoris, myocardial infarction,
aigraine, vomiting, psychotic, neurological disorders and dyskinesias can
be treated. The H218 polynucleoride can also used for obtaining
hybridisation probes and primers for isolating full-length clones
encoding H218. The difference in CDNA or genomic sequence between
affected and unaffected individuals is determined to identify mutation
causing the disease. It is also valuable for chromosome identification.
The polympetide is used for the identification of membrane bound or paragraphy accorders through and any according the disting the disting the disting and any according the disting the disting the disting the distingtion of membrane and any according and any according the distingtion of membrane and any according any according any according the distingtion of membrane and any according any according the distingtion and any according the distingtion of membrane and any according any according the distingtion and any according the distingtion according the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIVCWLPAFSILLLDYACPVHSCPILYXAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             soluble receptors through standard receptor binding techniques and als for structure based design of agonist, antagonist or inhibitor of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYXAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FSLLAIAIAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                     Novel human transmembrane receptor protein for use in treatment and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV
                                                                         Tsui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.7%; Score 1804; DB 2; Length 353; 99.4%; Pred. No. 1.7e-176;
                                                                         Mooney JL,
                                                                         Li X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 1.7e
1; Mismatches
                                                                         Lane P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY28288 standard; protein; 353 AA.
                       (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                            Claim 1; Page 29; 49pp; English.
                                                                         Bergsma DJ, Elshourbagy N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best_Local Similarity >>.*
Matches 351; Conservative
                                                                                                                                                                                                                            diagnosis of disease.
                                                                                                                           1999-633972/54
                                                                                                                                                   N-PSDB; AAZ32488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
AAY28288
ID AAY2
XX
AC AAY2
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

AAY28288

61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120

```
c an event isolated lyeding an inflammatory response signaling pathway and an apoptotic signaling pathway. They can be used for identifying agonists or antagonists of NE-KB or IL-8 modulated EDG or iL receptors. Agonists or antagonists of NE-KB or IL-8 modulated EDG or iL receptors. Agonists or immune response. Antagonists can be used for the downregulation of an inflammatory process condition or immune response. The agonists and inflammatory process condition or immune response. The agonists and inflammatory process condition or immune response. The agonists and inflammatory process condition or immune response. The agonists and compression the LL/EDG receptor. A diagnostic test for aberrant expression of HEDG-4 can accelerate diagnosis and proper treatment of abnormal comprising the LL/EDG receptor. A diagnostic test for aberrant expression of HEDG-4 may play a role of e.g. the heart, kidney, lung and testis. Specific examples of conditions in which aberrant expression of HEDG-4 may play a role include adult respiratory distress, asthma, rheumatoid arthritis, stroke, cardiac ischemia, acute pancreatitis, septic shock, psoriasis, acute cyclosporine nephrotoxicity, HIV/AIDS, myelodysplasia, cirrhosis of the filver, and early diabetic glomerulopathy, as well as lung damage following exposure to cigarette smoke, asbestos or silica. HEDG-4 specific antibodies, inhibitors, ligands or their analogs can be used as specific antibodies, inhibitors, ligands or their analogs can be used as specific antibodies, inhibitors, ligands or their analogs can be used as specific antibodies, inhibitors, ligands or their analogs can be used as specific antibodies, inhibitors, ligands or their analogs can be used as specific antibodies, inhibitors, ligands or their analogs can be used as specific antibodies, inhibitors, ligands or kellowish acceleration, or the genes of kidney, lung, heart, or the nervous system of kidney, lung, heart, or the nervous system of kidney, lung, heart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated lysolipid/EDG receptor useful in the treatment of asthma and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A novel isolated lysolipid (LL) receptor/EDG receptor (EDG-4). The {
m LL/EDG}
                                                                                                              EDG-4; polypeptide; receptor; inflammation; amino acid; G protein; lysolipid; immune response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gupta AK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vyas TB,
                                                                   Predicted polypeptide product from human EDG-4 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peters D, Kooshesh F,
                                                                                                                                                                                                                                                                       /label= unknown
/note= "encoded by YTT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ALLX ) ALLELIX BIOPHARMACEUTICALS INC.
                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 7; Fig 16A; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0070185P.
98US-0080610P.
98US-0109885P.
                                                                                                                                                                                                                                                                                                                                                                                                                                        98WO-CA001195.
                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kamboj R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-430392/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 353 AA;
                                                                                                                                                                                                                              Key
Misc-difference
                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                               WO9935259-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                        30-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-APR-1998;
25-NOV-1998;
                       12-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Munroe DG,
```

```
The present sequence represents an Edg polypeptide. The specification describes Edg4 and Edg5 polypeptides. The Edg4 gene is located on chromosome 19p12. The Edg polypeptides are receptors for lysophospholipids and sphingolipids, such as lysophosphatidic acid (LPA) and sphingosine 1-phosphate (S1P). The Edg receptor proteins are used for diagnosing an LPA or S1P mediator condition an individual. Edg4 and Edg5 colypeptides can be used in screening assays designed to determine the effects of a candidate bioactive agent on the expression and activity of Edg4 and Edg5 polypeptides, and the function of LPA and S1P. Nucleotide sequences encoding Edg-4 and Edg-5 are useful as hybridisation probes, in chromosome and gene mapping and in the generation of anti-sense RNA and DNA. Nucleic acids which encode Edg4 or Edg5 or their modified forms can also be used to generate either transgenic animals or knock out animals.
                                                                                                       240
                                                                                                                                          VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                              241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human polypeptide receptors for lysophospholipids and sphingolipids, native human Edg4, Edg5, mutant of Edg4 comprising extended polypeptide tail, used to screen agents that affect LPA and S1P
                   121 PSLIAIAIERHVAIAKVKLYGSDKSCRMILLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                         181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                     TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                               RPLQCWRPGVGVGVGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edg4; Edg5; lysophospholipid receptor; sphingolipid receptor; S1P; lysophosphatidic acid; LPA: sphingosine 1-phosphate; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Amino acid sequence of the human Edg5 polypeptide.
                                                                                                                                                                                                                                                                                                                                     AAB18889 standard; protein; 353 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 13; Fig 3; 67pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00274752.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-2000; 2000WO-US007649.
                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-638230/61.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             An S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB; AAA96163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         in gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200056135-A2.
                                                                                                                                                                                                                                                                                                                                                                                                        08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        activities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goetzl EI,
                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                      AAB18889;
                                                                                                                                          241
   121
                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Edg4;
                                                                                                                                                                                                                                                                                                  RESULT 4
                                                                                                                                                                                                                                                                                                                                                                       ઠે
                              셤
                                                                     ઠે
                                                                                                셤
                                                                                                                                          ઠે
                                                                                                                                                                       g
                                                                                                                                                                                                             8
                                                                                                                                                                                                                                          원
```

ö

0; Gaps

Score 1803; DB 2; Length 353; Pred. No. 2.1e-176; 1; Mismatches 1; Indels (

99.7%;

Query Match Best Local Similarity 99.44 Matches 351; Conservative

09

NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120

5

ò

뭐 ઠ

1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to Edg receptors (ABP59277-ABP59290). The Edg receptors, are useful in a high-throughput screening assay to identify compounds that bind to or modulate the activity of the polypebtide, in calcium mobilisation assays, binding assays, detection of cAMP formation, or in reporter gene techniques
                                                                                                                                                                                                                                                               240
                                                                                                                   NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                      180
                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                         VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New chimeric Edg receptor, useful in high-throughput screening assays, comprises extracellular and transmembrane domains of a first Edg receptor, and a chimeric intracellular domain of a second Edg receptor.
                                                                                                                                    NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALKTVTIVLG
                                                                                                                                                                                                                                                                                                             VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                       1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                          FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                            MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                  RPLOCWRPGVGVGVRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                  ö
    Length 353;
                               Indels
                                  3;
  Score 1787; DB 3;
Pred. No. 9.3e-175;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Spencer JV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABP59285 standard; protein; 353 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 19; 71pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUL-2002; 2002WO-US022346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-JUL-2001; 2001US-00904099
     98.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
Query Match
Best Local Similarity 98.9
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ŕ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; Edg; receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Munning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-221718/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Edg5 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003006503-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CERE-) CERETEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o,
                                                                                                                   61
                                                                                                                                              19
                                                                                                                                                                          121
                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shankar
                                                                                                                                                                                                                                                                                                                                                                                                                                   윱
                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                      셤
                                                                                                                  8
                                                                                                                                                                         ò
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                        ò
```

6; Length 353;

Score 1787; DB

98.88;

Query Match

```
ö
                                                                                                                                                    180
                                                                                                                                                                                                            240
                                                                                                                                                                                                                          181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to methods for screening for preventives or remedies for proliferative glomerular nephritis, depending on the inhibitory effect on Endothelial Differentiation Gene, Edg-5, activation. The method is especially useful for screening preventives or remedies for IgA nephritis. The present sequence is human Edg-5, which was used in the method of the invention
                                                                                                                         120
                                                                                                                                                                               180
                                                                                                                                                                                                                                                                VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV 120
                                                                 9
                                        9
                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                              NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                   121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                            TVLPLYAKHYVLCVVTIFS11LLAVVALYVR1YCVVRSSHADMAAPQTLALLKTVT1VLG
                                       1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Screening drugs for preventing or treating (mesangial) proliferative glomerular nephritis, based on inhibiting activation of Edg-5 for particularly Edg-5 receptor antagonists.
                                                                                                                                                                                                                                                                                                                                        RPLQCWRPGVGQRRRVGTPGHHLLPLRSSSSLERGMAMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                        RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHWPTSPTFLEGNTVV 353
              ö
             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, nephrotropic, proliferative glomerular nephritis;
Endothelial Differentiation Gene, Edg-5; IgA nephritis.
9.3e-175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Endothelial Differentiation Gene, Edg-5.
              Mismatches
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                           ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tsujimoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; Page 44; 59pp; Japanese.
           1;
                                                                                                                                                                                                                                                                                                                                                                                                                        ABB98694 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NNSH ) NIPPON SHINYAKU CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAR-2001; 2001JP-00088018.
06-SEP-2001; 2001JP-00270551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2002; 2002WO-JP002828.
98.98;
              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Katsuma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-018956/01
Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; ABQ81030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200277642-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rakagaki K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-OCT-2002
Best Local Sim
Matches 349;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABB98694;
                                                                                                                         61
                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                              ABB98694
                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                        ò
                                                             셤
                                                                                             8
                                                                                                                   셤
                                                                                                                                               8
                                                                                                                                                                          g
                                                                                                                                                                                                  ਨੇ
                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                        8
```

```
ö
                                                                                                                                                         NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQMFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                             121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                      181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                              VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                 9
                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                               1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                        FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
    Length 353;
                                        Indels
Score 1787; DB 6;
Pred. No. 9.3e-175;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABU08813 standard; protein; 353
    Query Match
Best Local Similarity 98.9%;
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABU08813;
                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                 셤
                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                        ઠ
```

Human; lymphocyte activation; lymphocyte migration; EDG-5; G-protein coupled receptor; GPCR; lymphocyte; T cell receptor; CD69; gene therapy; asthma; allargy; autohmmune disease; multiple sclerosis; scleroderma; pernicious anaemia; IDDM; insulin-dependent diabetes mellitus; tissue transplant; graft-versus-host disease; inflammation; infection. 11-AUG-2003 (first entry) Human EDG-5 protein.

03-OCT-2001; 2001US-00971228. 18-APR-2001; 2001US-0284763P. US2002155512-A1. 24-OCT-2002 Homo

Jiang Y; Zhao H, ьi С, Pardo J, Chu P, Masuda E, WPI; 2003-340852/32 Liao XC,

(RIGE-) RIGEL PHARM INC.

Identifying lymphocyte modulator activation/migration, by contacting an BDG G-protein coupled receptor polypeptide or cell having the polypeptide with compound and determining chemical/phenotypic effect of compound on cell.

Disclosure, Fig 2; 70pp; English.

The invention discloses method for identifying a compound that modulates lymphocyte activation/migration. The method comprises contacting an EDG (-protein coupled receptor (GPCR) family polypeptide, or its fragment or

cell comprising the polypeptide or its fragment with the compound, and determining the chemical/phenotypic effect of the compound upon the cell. Also disslosed are methods for modulating lymphocyte activation or migration in a subject, by administering to the subject a therapeutically effective amount of an identified compound, an EDG polypeptide or a conclain an EDG, or its fragment, and for screening for modulating or Ectivation, by transfecting into lymphocytes a condulators of lymphocyte activation, by transfecting into lymphocytes a condulating or B cell receptors of the lymphocytes activation of lymphocyte activation by detecting the level of CDG cell surface expression and rescuing cDNAs that modulate cylmphocyte activation. The method is useful for identifying a compound such as an antibody, antisense molecule, small organic molecule, cylmphocyte activation or apphingolipid analogue) that modulates lymphocyte cativation or migration. The compounds identified are useful for the treatment (e.g. gene therapy) of diseases such as asthma, allergy, cutofimmume diseases such as multiple solerosis, sclerosis, permicious and tissue transplant such as graft-versus-host disease, acute and chord inflammation, an infection such as viral, fungal, protozoal or chronic inflammation, an infection such as viral, fungal, protozoal or chronic inflammation, an infection such as viral, fungal, protozoal or chronic inflammation of lymphocyte migration is desired. The sequence and stimulation of lymphocyte migration is desired. The sequence corrected is the human EDG-5 protein 240 240 G protein-coupled receptor; GPCR; antigenic peptide; gene therapy; G protein-coupled receptor modulator; antibody; immune-related disease; growth-related disease; cell regeneration-related disease; AIDS; cancer; immunological-related cell proliferative disease; autoimmune disease; Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy; osteoporosis; cardiomyopathy; inflammation; Crohn; s disease; diabetes; graft versus host disease; Parkinson's disease; multiple sclerosis; psoriasis; anxiety; depression; schizophrenia; dementia; memory loss; mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea; 120 120 180 180 300 241 VFIVCWLPAFSILLIDYACPVHSCPILYKAHYFFAVSTLNSLINPVIYTWRSRDLRREVL 300 9 1 MGSLYSEYLMPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSAFITLSASV TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR Gaps 301 RPLOCWRPGVGVGRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353 RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353 ö Length 353; Indels Human sphingolipid receptor Edg5 protein SEQ ID NO:508. Score 1787; DB 6; Pred. No. 9.3e-175; Pred. No. 9.3e 1; Mismatches ż ABP82010 standard; protein; 353 98.8**%**; 98.9**%**; (first entry) Matches 349; Conservative Local Similarity Sequence 353 AA; 04-MAR-2003 241 ABP82010; 61 61 121 121 181 181 301 Query Match RESULT 8 ABP82010 &&&&&&&&&& 8 ద ઠ 셤 δ 셤 8 셤 ò 셤 ઠે

φ

```
181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TAKE ) TAKEDA CHEM IND LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matsumura F, Kawamata Y,
                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 98.9
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kobayashi M,
                                                                                                                                                                                                                                                                                                             Protein of human EDG-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-533023/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ADC40486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003052096-A1
                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                             18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hinuma S,
                                                                                               301
                                                                                                                                                                                                                                             ADC40485;
                                                                                                                                                                                                                                                                                                                                                                                                                           Ношо
                                                                                                                                                                              RESULT 9
                                                                                                                                                                                              ADC40485
                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                            셤
                                                                                                                           셤
                               ઠે
                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes antigenic peptides (I) comprising: (a) any one of 1601 sequences (see ABP82019 to ABP83619) of 12-24 amino caids. Also described: (1) an assay for the detection of a particular G protein-coupled receptor (GPCR) or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or articular GPCR. (I) can be used as GPCR modulators and in gene therapy. The antigenic peptides for GPCRs are useful in detecting an antibody against a particular GPCR. and in the production of specific antibody against a particular GPCR. and in the production of specific antibodies. The peptides and antibodies are also useful for detecting the presence or absence of corresponding GPCRs. The antigenic peptides for GPCRs and antibodies are useful for diagnosing and designing drugs for careaing immune-related disease, immunological-related disease, coll recating immune-related diseases, immunological-related disease, coll sease, atherosclerosis, bacterial, fungal, protozoan or viral infections, atherosclerosis, bacterial, fungal, protozoan or viral infections, atherosclerosis, bacterial, fungal, protozoan or viral infections, cosecoarthritis, osteoporossis, cancer, cardiomyopathy, chronic and acute inflammation, allergies, Crohm's disease, graft versus host disease, parkinson's disease, multiple sclerosis, pain, psoriasis, concertivities, trauma, tuberculosis, obesity, nausea, hypertension, hyperension, renal disorders, rheumaciod arthritis, trauma, ulcers, or any other disorder in which GPCRs are involved. The antibodies may be used in immunoassays and immunodiagnosis, ABZ2223 to ABZ22869 encode GPCR proceins given in ABSP1675 to ABZ2289 encode exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                          New isolated antigenic peptides e.g., for G protein-coupled receptors (GPCR), useful for diagnosing and designing drugs for treating conditions in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSLLAIAIRRHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLLIGASWLISLVLGGLDILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
 hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSBYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.8%; Score 1787; DB 6; Length 353; 98.9%; Pred. No. 9.3e-175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 1; 523pp; English.
                                                                                                                                                                                                             (LIFE-) LIFESPAN BIOSCIENCES INC.
                                                                                                                                                                                                                                             Brown JP;
                                                                                                                                              19-DEC-2001; 2001WO-US050107.
                                                                                                                                                                              19-DEC-2000; 2000US-0257144P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 349; Conservative
                                                                                                                                                                                                                                             Burmer GC, Roush CL,
                                                                                                                                                                                                                                                                             2003-046718/04
                                                                                                                                                                                                                                                                                                                                                                            autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                              N-PSDB; ABZ42860.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 353 AA;
                                                                                WO200261087-A2
                                                Homo sapiens.
                                                                                                              08-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               collective quantitative analysis of the expression of a number of genes to identify those that are promoted or inhibited in a given cell or tissue. The genes are preferably gene families such as the G protein coupled receptor family, tyrosine oxidase receptor family, or ion channel gene family. The methods may be used in treatment of cancers, including prostate, ovarian, stomach, bladder, breast, and cancer of the intestines. EDG-1 and EDG-2 receptor agonists and antagonists may be used in the treatment and prevention of atherosclerosis, myocardial infarction, infarct or ischaemic disease of the brain. This sequence represents a protein of human EDG-5 of the invention.
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene expression analysis; collective quantitative analysis; g protein coupled receptor; tyrosine oxidase receptor; amily; ion channel gene family; cancer; EDG-1; EDG-2 receptor; atherosclerosis; myocardial infarction; infarct; ischaemic disease; GPCR; human; EDG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel method for gene expression analysis by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Komatsu H;
                                                                                                                                         353
                                                                                                                                                                         .
0
                                                                                                                                         RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method for gene expression analysis for treatment of cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98.8%; Score 1787; DB 7; Length 353; 98.9%; Pred. No. 9.3e-175; ive 1; Mismatches 3; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fujii R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fukusumi S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 46; 261pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Arai T,
', Ogi K;
                                                                                                                                                                                                                                                                                                                                                                                  ADC40485 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-DEC-2001; 2001JP-00382053.
21-FEB-2002; 2002JP-00045104.
15-MAY-2002; 2002JP-00140111.
18-NOV-2002; 2002JP-00333769.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-DEC-2002; 2002WO-JP013097
```

```
The present invention describes a method for identifying an increase in risk for Type II diabetes mellitus and/or venous thrombosis/pulmonary embolism, comprising determining the presence of amino acid exchange at position 286 from Val to Ala in the EDGS protein. Also described: (1) a method for screening pharmaceuticals useful for treating and/or preventing type II diabetes and/or venous thrombosis/pulmonary embolism, where a cell or cell extract is used that contains EDGS with the amino acid exchange, or the Variation in the nucleotide sequence of EDGS contains or the EDGS-286-AA; (2) a method for adapting the dosage of the pharmaceutical described above by testing the human cell for the presence of EDGS with the amino acid exchange, or the Variation in the nucleotide sequence of EDGS procein or the EDGS-286-AA; (3) a method of selecting patients who will respond type II diabetes and/or venous thrombosis/pulmonary embolism by testing the probe of the respective
                                                                                                                                                                     240
                                                                                                                                                                                                           VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Type II diabetes mellitus; venous thrombosis; pulmonary embolism; EDG5; EDG5 V286A; antidiabetic; thrombolytic; gene therapy; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying an increase in risk for Type II diabetes mellitus and/or venous thrombosis/pulmonary embolism comprises determining in a probe tpresence of amino acid exchange at position 286 from Val to Ala in the
                                                                                                                                                     TVLPLYAKHYVLCVVTIPSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSASITLSASV
                                                                         FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                               TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                     PSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŝ
                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                     301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ricard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jacobs M, Deleuze J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; SEQ ID NO 3; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Siegler K,
                                                                                                                                                                                                                                                                                                                                                                                                                     ADD11247 standard; protein; 353 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AVET ) AVENTIS PHARMA DEUT GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human EDG5 protein SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-APR-2002; 2002EP-00007879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2003; 2003WO-EP003569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kozian D, Kostenis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003-804314/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-804314/
N-PSDB; ADD11248.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003085130-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-OCT-2003
                                                                                                                                                                                                           241
             61
                                                   121
                                                                                                                               181
                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EDGS
                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                   8
         셤
                                                   δ
                                                                                   g
                                                                                                                           ò
```

```
180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                           NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
patient for the presence of EDG5 with the amino acid exchange, or the variation in the nucleotide sequence of EDG5 protein or the EDG5-286-AA; and (4) a test kit for testing the presence of the amino acid exchange, or the variation in the nucleotide sequence of EDG5 protein or the EDG5-286-AA. EDG5 has antidiabetic and thrombolytic activities, and can be used in gene therapy. The methods are useful for identifying an increase in risk for type II diabetes mellitus and/or trombosis/pulmonary embolism, and for screening pharmaceuticals useful for treating type II diabetes mellitus and/or venous thrombosis/pulmonary embolism. The methods are also useful for adapting the dosage of a pharmaceutical useful for treating the above diseases. The methods are useful for selecting patients who will respond to the pharmaceutical. The present sequence represents the human EDG5 protein, which is used in an example
                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor; human; Edg5 receptor; gastrointestinal disorder; cardiovascular disorder; hypertension; diabetes; respiratory disorder; asthma; immune disorder; cognitive disorder; memory disorder; obesity; pain; psychotic behaviour; affective disorder; migraine; cancer; AIDS; wound healing; ischaemia-reperfusion injury-related disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                   Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                 Score 1787; DB 7;
Pred. No. 9.3e-175;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADD90760 standard; protein; 353
                                                                                                                                                                                                                                                                    98.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-AUG-2002; 2002US-00228762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00253998.
                                                                                                                                                                                                          from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                    Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human Edg5 receptor.
                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                         Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003130493-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-FEB-1999;
16-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADD90760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADD90760
      8888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
```

(SALO/) (WILS/) (NAGO/)

(HUAN/) BORO/)

```
This invention relates to a novel method for identifying an increase in risk for type II diabetes mellitus, venous thrombosis, pulmonary embolism or a combination thereof. Specifically, it refers to a the endothelial differentiation gene 5 (EDG5) located on chromosome 19913.2, which encodes a G protein coupled receptor protein. The present invention describes an immunochemically reactive labelled antibody based kit that can be used to identify the Val286Ala variation in the EDG5 protein encoded by a single nucleotide polymorphism. Furthermore, this allele encoding the V286A variant represents a genetic marker that can be useful for preventexive treatments of the aforementioned diseases, as well as for prevent action in phase or clinical studies. This polypeptide sequence is the human EDG5 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying an increase in risk for type II diabetes mellitus, venous thrombosis, pulmonary embolism or its combination in subject by determining whether amino acid residue at position 286 of EDG5 protein is
                                             3 protein coupled receptor; EDGS; type II diabetes mellitus;
venous thrombosis; pulmonary embolism; endothelial differentiation gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
    Human endothelial differentiation factor 5 (EDG5) protein SeqID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.8%; Score 1787; DB 8;
98.9%; Pred. No. 9.3e-175;
tive 1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jacobs M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2.4; SEQ ID NO 3; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Siegler K,
                                                                                                                                                                                                                                                                     21-MAR-2003; 2003US-00393870.
                                                                                                                                                                                                                                                                                                             09-AUG-2002; 2002US-0402305P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kozian D, Kostenis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-060183/06.
                                                                                                                                                                                                                                                                                                                                                      KOZIAN D.
KOSTENIS E.
SIEGLER K.
JACOBS M.
DELEUZE J.
RICARD S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; ADH57162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 353 AA;
                                                                                                                                                                              US2003219808-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MACE S.
                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Simi
Matches 349;
                                                                                                                                                                                                                         27-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                      (JACO/)
(DELE/)
(RICA/)
(MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    alanine.
                                                                                                                                                                                                                                                                                                                                                                             (KOST/)
(SIEG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŝ
                                                                                                                                                                                                                                                                                                                                                         (KOZI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mace
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an isolated nucleic acid encoding a mammalian Edg7 receptor. The mammalian Edg7 receptor proteins and nucleic acid encoding the proteins are useful for diagnosing and treating an abnormality associated with the activity of the mammalian Edg7 receptors, ciaberes, respiratory disorder, asthma, immune disorder, hypertension, disorder, memory disorder, obssity, pain, psychotic behaviour, affective disorder, migraine, cancer, AIDS, wound healing, or ischemia-reperfusion injury-related diseases. The nucleic acids and proteins are also useful in developing and designing drugs with higher specificity and fewer side effects. The nucleic acid such encoding mammalian Edg7 receptors and antisense oligonucleotides complementary to the nucleic acid sequences. The methods are also useful for identifying agonists and antagonists of Edg7 receptors. The present sequence represents the amino acid sequence of the human Edg5 receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                         New mammalian Edg7 receptor proteins and nucleic acids encoding mammalian Edg7 receptors, useful for diagnosing and treating an abnormality associated with the activity of the mammalian Edg7 receptor, e.g. asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGHNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                            Nagorny
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RPLOCWRPGVGRRRVGTPGHHLLPLRSSSLERGMHMPTSPTFLEGNTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 353;
                                                                                                                                                        Wilson A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1787; DB 7;
Pred. No. 9.3e-175;
1; Mismatches 3;
                                                                                                                                                          Borowsky BE, Salon JA,
                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 19; 64pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH57161 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 98.9%;
Matches 349; Conservative
                                                                                                                                                          Bonini JA, Huang LY,
                      HUANG L Y.
BOROWSKY B E.
SALON J A.
                                                                                                                                                                                                   WPI; 2003-829581/77
BONINI J A.
                                                                                      WILSON A.
                                                                                                                                                                                                                                                                                                                migraine or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 353 AA;
```

н

ò

셤 ð ద ò a ò 유 ò 쉽 à

61 61 121 121 181 181 241

Ricard S;

Deleuze J,

240

TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG

181

ò

셤

(first entry)

25-MAR-2004

ADH57161

301 301

120

180 180

120

9 9

ö

Indels

Length 353;

σ

ö

Gaps

ô

3; Indels

Mismatches

1;

349; Conservative

Matches

```
The invention relates to a compound 8-80 nucleobases in length targeted to, and which specifically hybridises with a nucleic acid molecule account of ancoding endothelial differentiation gene 5 (EDG5, a G protein coupled receptor, involved in development, wound healing, tissue regeneration, cellular proliferation, apoptosis, cancer, angiogenesis and inflammation), and inhibits the expression of EDG5, i.e. is an antisense inflammation), and inhibits the expression of EDG5, i.e. is an antisense compound and a carrier or diluent and a method for screening an antisense compound (by contacting a preferred target region of a nucleic acid molecule encoding EDG5 with one or more candidate antisense compounds that inhibit the expression of a nucleic acid encoding EDG5). The compound, composition and methods are useful for treating a disease or condition associated with EDG5, such as a hyperproliferative disorder, developmental disorder or a disease or condition arising from aberrant apoptosis. They are also useful in research and disquostics for modulating the expression of EDG5. Experimental protocols are described but no results are given. The present sequence is the human EDG5 protein.
                      241 VPIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                            Human; receptor; antisense gene therapy; endothelial differentiation gene 5; EDG5; G protein-coupled receptor; development; wound healing; tissue regeneration; cellular proliferation; apoptosis; cancer; anglogenesis; inflammation; hyperproliferative disorder; developmental disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotide targeted to nucleic acid encoding endothelial differentiation sphingolipid G-protein-coupled receptor 5, for treating cancer, developmental disorder or a condition arising from
                                                                                                   RPLOCWRPGVGVOGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                      Human endothelial differentiation gene 5 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 31-32; 50pp; English.
                                                                                                                                                                                                                       Ź
                                                                                                                                                                                                                       ADJ62652 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-AUG-2002; 2002US-00215821.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-2002; 2002US-00215821
                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-179674/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aberrant apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; ADJ62544.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004029274-A1.
                                                                                                                                                                                                                                                                                                 06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-FEB-2004
  241
                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wyatt J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ношо
                                                                                                                                                                             RESULT 13
                                   셤
                                                                                                                 셤
                                                                                                                                                                                                                                       ò
```

Score 1787; DB 8; Length 353; Pred. No. 9.3e-175;

98.88;

Query Match Best Local Similarity

```
Transpanic mouse, neurological disorder; adrenal gland disorder;

W transpanic mouse, neurological disorder; acrdiovascular disorder;

Clon disorder; intestinal disorder; cardiovascular disorder;

Colon disorder; blood disorder; immune disorder; bone disorder;

Colon tdisorder; blood disorder; immune disorder; cancer;

W kidney disorder; liver disorder; nutritive disorder; cancer;

W kidney disorder; liver disorder; prostate disorder; preast disorder;

W kidney disorder; thyroid disorder; prostate disorder; spleen disorder;

W thymus disorder; thyroid disorder; pancreas disorder; spleen disorder;

W thymus disorder; thyroid disorder; antiparkinsonian; antimanic;

CNS; central nervous system; respiratory; antidiarhoeic; antidiabetic;

W virucide; hepatotropic; antibacterial; antiansemic; antidiabetic;

dermatological; antiulcer; antibacterial; antiansemic; antiseborrhoeic;

M immunosuppressive; nephrotropic; gene therapy; GPCR modulator; human;
                                                              120
                                                                                                                                180
                                                                                                                                                               180
                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                 300
                             9
                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                PSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                   NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel mammalian G protein coupled receptors, useful for identifying
                                                                                                                                                                                                                                                                                                                                                       RPLOCWRPGVGVGRRRVGTPGHHLLPLRSSSSLERGWHWPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                    RPLOCWRPGVGVGVGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Li F;
Zeng H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J,
Madisen L, Mcilwain KL, Pavlova MN, Vassilatis D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AD029293 standard; protein; 353 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human GPCR EDG5, SEQ ID NO:394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-SEP-2002; 2002US-0409303P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-SEP-2003; 2003WO-US028226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-390329/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PRIM-) PRIMAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ADO29865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004040000-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Madisen L,
                                                                                                                                                                                                181
                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AD029293;
                                                                61
                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
ADO29293
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                          a
                                                              ò
                                                                                            d
                                                                                                                                ò
                                                                                                                                                             g
                                                                                                                                                                                                ò
                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                 8
```

compounds that modulates diagnosing and treating disease condition associated with GPCR dysfunction e.g. autoimmune diseases, angina pectoris, Parkinson's disease.

12-AUG-2004 (first entry)

ADO57997;

Claim 151; SEQ ID NO 394; 542pp; English.

The invention relates to human and mouse G protein-coupled receptors (GPCRS) and nucleic acids encoding them. The invention also relates to sequences at least 90% identical to the GPCR proteins and nucleic acids cof the invention; methods of treating, preventing or diagnosing diseases associated with GPCRs of the invention; methods of screening for compounds useful in the treatment of GPCR-related diseases, a transgenic compounds useful in the treatment of GPCR-related diseases, a transgenic computed in a GPCR transgene or in an endogenous GPCR gene; cells derived from the transgene or in an endogenous GPCR gene; cells derived computed in a different GPCR population; and wite, each of which has a mutation in a different GPCR population of the invention. The probes which hybridise to GPCR populations of the invention. The comprising a GPCR nucleic acids and proteins may be used in the diagnosis, treatment or prevention of a wide variety of diseases including neurological disorders (e.g., Alzheimer's disease, disorders of the adrenal gland; disorders of the colon or intestine of disorders of the adrenal gland; disorders of the colon or intestine or myocardial infarction); muscular disorders (e.g., autoimmune disorders or anaemia or leukaemia); immune disorders (e.g., autoimmune disorders (e.g., atthirtis, gout or osteoporosis); metabolic or nutritive disorders or atthirtis, gout or osteoporosis); metabolic or nutritive disorders or hearts or any disorders of the kidney, liver, lung, breast, overly the property of the property of the disorders or the disorders of the colon or intention of a disease or vitamin deficiency-related diseases or vitamine the protein and the prot uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and thyroid (e.g., cancers). The present sequence represents a GPCR of the invention. Note: The full sequence data for this patent did not form part of the printed specification; those sequences not shown were obtained in electronic format directly from WIPO at the print pub/published_pct_sequences.

###X#XDDDDDDDDDDDDDDDDDDDDDDDDDDXX

Sequence 353 AA;

ô 120 240 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300 9 9 TVLPLYAKHYVLCVVTIFFIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353 ; 0 98.8%; Score 1787; DB 8; Length 353; 98.9%; Pred. No. 9.3e-175; ive 1; Mismatches 3; Indels (Best Local Similarity 98.9 Matches 349; Conservative 61 19 121 181 181 241 Query Match 121 셤 셤 g ઠે 셤 ò a ò ò

ADO57997 standard; protein; 353 AA. RESULT 15 ADOS7997 ID ADOS79 XX

301

endothelial differentiation sphingolipid, G-protein-coupled receptor 5; BGD5; cardiovascular disease; gastroentezology system; reproductive; peripheral; central nervous system; respiratory; analgesic; antiarrhythmic; antiarteriosclerotic; antiasthmatic; antibacterial; centrility; antiinflammatory; antiparkinsonian; antiulcer; cardiant; cerebroprotective; dermatological; synecological; neuroprotective; nootropic; vasotropic; virucide; human. Screening for therapeutic agents, useful for treating e.g. respiratory disease, comprises contacting a test compound with endothelial differentiation sphingolipid G-protein-coupled receptor 5 polypeptide and Ή Golz S, Brueggemeier U, Summer 31-OCT-2003; 2003WO-EP012122. 13-NOV-2002; 2002EP-00025098 Human EDG5 receptor protein. (FARB) BAYER HEALTHCARE AG. WPI; 2004-449580/42. N-PSDB; ADOS7996. detecting binding. WO2004044587-A2 Homo sapiens. 27-MAY-2004

Disclosure; SEQ ID NO 2; 119pp; English.

diseases. The compositions have the following activities: analgest, antiarrhythmic, antiarteriosclerotic, antiasthmatic, antibacterial, antiarrhythmic, antiarteriosclerotic, antiasthmatic, antibacterial, antiarrhythmic, antiarrer, antipackinsonian, antiarcer, cardiant, cerebroprotective, dermatological, gynecological, neuroprotective, cerebroprotective, dermatological, gynecological, neuroprotective, corporation, and virucide. The regulators of EDG5 are useful concropic, vasotropic, and virucide. The regulators of EDG5 are useful cardiovascular diseases, disorders of the peripheral and central nervous system, and respiratory diseases in a mammal. They are also useful for the regulation of EDG5 activity in a mammal having the disease.

Cardiovascular disease includes heart failure, myocardial infarction, cardiovascular disease includes heart failure, myocardial infarction, is chaemia, arrhythmias, and atherosclerosis. Examples of disorders of the gastrictis, gastric ulcers, and chronic pancreatitis. Examples of satritis, and chronic pancreatitis. Examples of satritis, dysmenorrhoea, and infartility. Disorders of the peripheral and central nervous system include Parkinson's disease, dementia, multiple sclerosis, ctroke, and Alzheimer's disease. Respiratory diseases can be asthma or The invention relates to a novel method for screening for therapeutic agents. The method comprises contacting a test compound with an endothelial differentiation sphingolipid G-protein-coupled receptor 5 compound, or determining EDG5 polypeptide and detecting binding of the test compound, or determining EDG5 polypeptide activity at a certain test compound concentration of the test compound. The invention further discrets of the gastroenterology system, reproductive diseases, disorders of the gastroenterology system, reproductive diseases, disorders of the partipheral and central nervous system, and respiratory diseases in a mammal. The invention also comprises a pharmaceutical composition for the treatment of the diseases above comprising an EDG5 polypeptide, an EDG5 polypeptide, or a therapeutic agent which binds to an EDG5 polypeptide or which regulates the EDG5 polypeptide or a court as a small molecule, an RNA molecule, an antisense oligonucleotide, a polypeptide, an entipedy, or a ribozyme; and preparation of a polypeptide, an antibody, or a ribozyme; and preparation of a polypeptide composition useful for treating the above defined

```
ö
chronic obstructive pulmonary disease. The nucleotide sequences encoding EDGS are useful as hybridization probes, in constructing oligomers for PCR, for chromosome and gene mapping, in the recombinant production of EDGS, in generating antisense DNA or RNA and in molecular biology techniques that have not yet been developed. EDGS polypeptides are useful for immunishing a mammal to produce polyclonal antibodies and for diagnostic purposes. This sequence represents the human EDGS receptor protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                    121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VFIVCWLPAFSILLLDYACPVHSCPILYXAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYPPAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGSLYSEYLNPWKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGMHPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                             Query Match 98.8%; Score 1787; DB 8; Length 353; Best Local Similarity 98.9%; Pred. No. 9.3e-175; Matches 349; Conservative 1; Mismatches 3; Indels (
                                                                                                                                                                                                       Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
               88888888888
                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
```

Search completed: December 4, 2005, 06:46:54 Job time: 131 secs

This Page Blank (uspio)

Sequence 100, App Sequence 18, Appl Sequence 199, App Sequence 199, App Sequence 63, Appl Sequence 96, Appl Sequence 116, App Sequence 2566, Appl Sequence 201, App Sequence 201, App Sequence 3106, App Sequence 131, Appl Sequence 131, Appl

US-10-980-388-119
US-10-980-388-100
US-10-980-388-100
US-10-980-388-115
US-10-990-388-115
US-10-990-388-116
US-10-990-388-96
US-10-980-388-96
US-10-689-742-13
US-10-689-742-13
US-10-689-742-13

87.5 87.5 87.5 87.8 86.5

84.5

83.5

93.5 89

```
26, Appli
8, Appli
2, Appli
6, Appli
2, Appli
44, Appli
2, Appli
                                                                                                                                                                      (without alignments)
281.714 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                               US-10-084-507B-17
1806
1 MGSLYSEYLNPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                            4, 2005, 06:23:26 ; Search time 6 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published Applications AA New:*

1: /cgn2_6/ptodata/1/pubpaa/US00 NEW PUB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US07 NEW PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US10 NEW_PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US10 NEW_PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US11 NEW_PUB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-851-667A-26
US-10-992-577-8
US-10-992-577-6
US-10-992-577-6
US-10-992-577-44
US-10-980-389-12
US-10-980-389-12
US-10-980-389-12
US-10-80-389-12
US-10-81-234-934
US-10-827-633-2
US-10-827-633-2
US-10-827-633-2
US-10-827-633-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                26661 segs, 4788334 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Match Length DB
                                                                                                                                                    December
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          112.8
111.8
111.9
110.9
10.2
10.2
10.2
10.2
10.2
10.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                  OM protein
                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š.
```

```
GENERAL INTOGRATION:

JENERAL INTOGRATION:

APPLICANT: Tigyi, Gabor

APPLICANT: Tigyi, Gabor

APPLICANT: Balcar, Vineet M.

APPLICANT: Brod, Don B.

APPLICANT: Brod, Don B.

APPLICANT: Baker, Daniel L.

APPLICANT: Baker, Daniel L.

APPLICANT: Wang, Dan

APPLICANT: Wang, Tamas

APPLICANT: Nusser, Nora

TITLE OF INVENTION: UPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF

TITLE OF INVENTION: US

TITLE OF INVENTION: US

TITLE OF INVENTION: UNMBER: 05/190,370

PRIOR FILING DATE: 2006-02-28

CURRENT FILING DATE: 2006-03-17

PRIOR FILING DATE: 2001-03-19

NUMBER OF SEQ ID NOS: 26

SOFTWARRER PREDICTION NUMBER: 09/811,838

PRIOR FILING DATE: 2010-03-19

NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTI 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  || : : | |: | : : | |: | || || 34 YNRSGKHLATEWNIVSKLVMGLGITVCIFIMLANLLVMVAIYVNRRFHFPIXYLMANLAA 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27.9%; Score 504; DB 7; Length 364;
34.3%; Pred. No. 6.4e-36;
itive 71; Mismatches 121; Indels 30; Gaps
ALIGNMENTS
                                                                                                                Sequence 2, Application US/11067884 Publication No. US20050261252A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 34.33
Matches 116; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , ORGANISM: Homo sapiens
US-11-067-884-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 2
LENGTH: 364
                                                                                               US-11-067-884-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

118, App 8, Appli

112, App 2, Appli 934, App 2, Appli 4, Appli 117, App 6, Appli

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence Sequence

US-10-131-826A-18

N

ò 셤 δ q δ 셤

```
60 KFHFPFYYLLANLAAADFFAGIAYVFLMFNTGPVSKTLTVNRWFLRQGLLDSSLTASLTN 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123 LLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTV 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQT-----LALL 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRS 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 KFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFS 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: LOS TITLE OF INVENTION: LOS TITLE OF INVENTION: USE TITLE OF INVENTION: USE TITLE OF INVENTION: USE TITLE OF INVENTION: USE CURRENT APPLICATION NUMBER: US/11/067,884

CURRENT APPLICATION NUMBER: 00/190,370

PRIOR FILING DATE: 2005-03-19

PRIOR FILING DATE: 2000-03-19

PRIOR FILING DATE: 2000-03-19

NUMBER OF SEQ ID NOS: 26

SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9 LNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCA-----IVVENLLVLIAVARNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 26.6%; Score 480.5; DB 7; Best Local Similarity 32.2%; Pred. No. 5.9e-34; Matches 101; Conservative 73; Mismatches 121;
  306 ----WRPGVGVQGRRRGGTPGHHLLP 327
                                           315 LROSTRESVHYTSSAQGGASTRIMLP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-10-851-667A-26
IS-10-851-667A-26
I Sequence 26, Application US/10851667A
I Publication No. US20050260608A1
GENERAL INFORMATION:
                                                                                                                                                       , Sequence 6, Application US/11067884
, Publication No. US20050261252A1
, GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              Liliom, Karoly
Fischer, David J.
Virag, Tamas
Nusser, Nora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293 RDLRREVLRPLQCW 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298 EDMYGTMKKMICCF 311
                                                                                                                                                                                                                                             Tigyi, Gabor
Dalton, James T.
Sardar, Vineet M.
                                                                                                                                                                                                                                                                                                                               Xu, Huiping
Baker, Daniel L.
Wang, Dean
                                                                                                                                                                                                                       APPLICANT: Miller, Duane D.
                                                                                                                                                                                                                                                                                                             Elrod, Don B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                   US-11-067-884-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-11-067-884-6
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    233
                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                           FSII-LLAIVALYVRIYCVVR----SSHADMAAPQ-----TLALLKTVTIVLGVFIVC 245
                                                                          246 WLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                       271 WTPGLVLLLLDVCCP--QCDVLAYEKFPLLLAEFNSAMPIIYSYRDKEMSATFRQILCC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SILVFLIMVAVYTRIFFYVRRRVQRMAEHVSCHPRYRETTLSLVKTVVIILGAFVVCWTP 256
154 QLHTRMSNRRVVVVIVVIWTMAIVMGAIPSVGWNCICDIENCSNMAPLYSDSY-LVFWAI 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKV 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTI 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   198 FSIILLAIVALYVRIYCVVRSSHADMA------APQTLALLKTVTIVLGVFIVCWLP 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    249 AFSILLLD-YACPVHSCPILYKAHYXFAVSTINSLINPVIYIWRSRDLRREVLRPLQC-- 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Liliom, Karoly
APPLICANT: Fischer, David J.
APPLICANT: Virag, Tamas
APPLICANT: Nusser, Nora
APPLICANT: Nusser, Nora
TITLE OF INVENTION: LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF TITLE OF INVENTION: USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 7; Length 351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26.8%; Score 484; DB 7; Length 351
35.9%; Pred. No. 3e-34;
ive 57; Mismatches 134; Indels
                                                                                                                                                                                                                    306 WRPGVGCRRRGGTPGHHLLPLRSSSSLER----GMH 339
                                                                                                                                                                                                                                                               QR----SENPTGPTESSD----RSASSINHTILAGVH 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 20609/305
CURRENT APPLICATION NUMBER: US/11/067,884
CURRENT FILING DATE: 2005-02-28
PRIOR APPLICATION NUMBER: 60/190,370
PRIOR PELING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/811,838
PRIOR PELING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin Ver: 2.1
                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 4, Application US/11067884; Publication No. US20050261252A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Miller, Duane D.
APPLICANT: Tigyi, Gabor
APPLICANT: Saloar, James T.
APPLICANT: Sardar, Vinneet M.
APPLICANT: Elrod, Don B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xu, Huiping
Baker, Daniel L.
Wang, Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 35.91
Matches 117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-11-067-884-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                           198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             138
```

ò 셤 8 g ઠે 원 ઠે ద ò

29

```
FILE REFERENCE: 57155-D/JPW
CURRENT APPLICATION NUMBER: US/10/992,577
CURRENT FILING DATE: 2004-11-18
PRIOR APPLICATION NUMBER: US/09/538,036
PRIOR APPLICATION NUMBER: 09/405,558
PRIOR APPLICATION NUMBER: 09/405,558
PRIOR FILING DATE: 1999-09-24
PRIOR FILING DATE: 1999-02-22
PRIOR PLING DATE: 1999-02-22
PRIOR APPLICATION NUMBER: 09/151,113
PRIOR APPLICATION NUMBER: 09/151,113
PRIOR APPLICATION NUMBER: 09/161,113
PRIOR FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 71
SEQ ID NO 8
LENGTH: 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/10992577
Publication No. US20050260687A1
GENERAL INFORMATION:
APPLICANT: Gerald, Christophe P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , ORGANISM: Rattus norvegicus
US-10-992-577-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 71
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                      US-10-992-577-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                     입
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  us-10-992-577-8

Sequence 8. Application US/10992577

Publication No. US20050260687A1

GENERAL INFORMATION:
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Bondin, James A.
APPLICANT: Bondsky, Beth E.
APPLICANT: Bondsky, Beth E.
TITLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors
TITLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors
FILE SPERENCE: 57155-D/JWW
CURRENT APPLICATION NUMBER: US/10/992,577

CURRENT APPLICATION NUMBER: US/09/538,036

PRIOR FILING DATE: 2000-03-29

PRIOR APPLICATION NUMBER: 09/405,558

PRIOR PLICATION NUMBER: 09/255,368

PRIOR PLICATION NUMBER: 09/255,368

PRIOR PLICATION NUMBER: 09/255,368
                                                                                        APPLICANT: Shohami, Bether
APPLICANT: Shohami, Bether
APPLICANT: Shohami, Raphael
TITLE OF INVENTION: METHODS, KITS AND PHARMACEUTICAL COMPOSITIONS FOR DIAGNOSING,
TITLE OF INVENTION: DELAYING ONSET OF, PREVENTING AND/OR TREATING OSTEOPOROSIS
FILE REFERENCE: 28030
CURRENT APPLICATION NUMBER: US/10/851,667A
CURRENT FILING DATE: 2004-05-24
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin version 3.2
SEQ ID NO 26
LENTH: 360
TYPE: PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          233 GMARWELDVRLAKTLGLVLAVILICWFPVLALMAHSLATTLSD---QVKKAFAFCSMLCL 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65 HSAMYLFLGNLAASDLLAGVAF-----VANTLLSGSVTLRLTPVQWFAREGSAFITL 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66 RKPSYLFIGSLAGADFLASVVFACSFVNFHVFHGVDSKAVFL-----LKIGSVTMTF 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SASVFSLLAIAIERHVAIAKVKLYGSDKSC----RMLLLIGASWLISLVLGGLPILGWNC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      175 CP--RPCSELFPLIPNDYLLSWLLFIAFLFSGIIYTYGHVLWKAHQHVASLSGHQDRQVP 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----QTLALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYXAHYXFA--VST 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     173 LGHLEACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRI-----YCVVRSSHADMAAP 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 VTEIANGSKDGLDSNPMKDYMILSGPQKTAVAVLCTLLGLLSALENVAVLYLILSSHXLR 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 VQEHYNYTKETLETQETTSRQVAS----AFIVILCCAI----VVENLLVL-IAVARNSKF 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
15.8%; Score 286; DB 6; Length 360;
Best Local Similarity 26.2%; Pred. No. 1.4e-17;
Matches 89; Conservative 64; Mismatches 133; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature
LOCATION: (63) ...(63)
OTHER INFORMATION: Non-synonymous polymorphism: Gln or Arg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :||::||||| || ::|
290 INSMVNPVIYALRSGEIRSSAHHCLAHWKKCVRGLGSEAK 329
                            Karaak, Meliha
de Vernejoul, Marie-Christine
Bab, Itai
                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-851-667A-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-992-577-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           279
                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
```

```
APPLICANT: Jones, Kenneth A.
APPLICANT: Bonini, James A.
APPLICANT: Browsky, Beth E.
APPLICANT: Craig, Douglas A.
APPLICANT: Craig, Douglas A.
TITLE OF INVENTION: DNA Brocding Mammalian Neuropeptide FF (NPFF) Receptors
TITLE OF INVENTION: And Uses Thereof
                                                                                                                                                                                                                                                                                                              226 PQTLALLKTVTIVLGVFI-VCWLPAFSILLL-DY---ACPVHSCPILYKAHYXFAVSTLN 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SRRRARVVHMLVMVALFFTLSWLPLWALLILLIDYGQLSAPQLHLVTVYAFPFAHWLAFFN 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ||:|| :::||
SSANPIIYGYFNENFRRGFQAAFRARLCPRPSGSHKEAYSERPGGLLHRRVFVVVRPSDS 381
                                                                                                                                                                                 48 VAYALIFLLC---WYGNTLVCFIVLKNRHMHTVTNMFILNLAVSDLLVGIFCMPTTLVDN 104
                                                                                                                                                                                                                                                                          95 SVTLRLTPVQWFAREGSAF------ITLSASVFSLLAIAIER-----HVAIAK 136
                                                                                                                                                                                                                                                                                                                                                                                                                 137 VKLYGSDKSCRMLLLIGASWLISLVL---GGLPILGWNCLGH--LEACSTVLPLYAKHYV 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         192 LC------SSHADMAA 225
                                                                                                                                       35 VASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSG 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapa
Query Match 12.4%; Score 224.5; DB 6; Length 430; Best Local Similarity 24.3%; Pred. No. 2.6e-12; Matches 99; Conservative 59; Mismatches 128; Indels 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281 SLLNPVIYTWRSRDLRR---EVLRPLQCWRP------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GVGVQGRRRGGTPGHHLLPLRSSSSLERGM-----HMP-TSPTF 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              382 GLPSESGPSSGAPRPGRLPLRNGRVAHHGLPREGPGCSHLPLTIPAW 428
```

```
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   277
                g
                                                          ò
                                                                                            g
                                                                                                                                                                       g
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                       ò
                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6, Application US/10992577
Publication No. US20050260687A1
| Publication No. US20050260687A1
| GENERAL INPORMATION:
| APPLICANT: Gerald, Christophe P.G.
| APPLICANT: Gones, Kenneth A.
| APPLICANT: Borowsky, Beth E.
| FILLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors
| FILLE OF INVENTION: Boundary Cont. 1-18
| FRIOR FILLING DATE: 2000-03-29
| PRIOR FILLING DATE: 1999-09-24
| PRIOR FILLING DATE: 1999-02-22
| PRIOR FILLING DATE: 1999-09-25
| NUMBER OF SEQ ID NOS: 71
| SOOTWARET PALENT NOS: 71
| SOOTWARET PALENT NOS: 71
                                          19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14;
                                                                                                                                                                               SDLLVGIFCMPTTLVDNLIT-------GMPFDNATCKMSGLVQGMSVSASVFTLV 135
                                                                                                                                                                                                                                                            SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAF------ITLSASVFSLL 124
                                                                                                                                                                                                                                      AIAIER-----HVAIAKVKLYGSDKSCRMLLLIGASWLISLVL---GGLPILGWNCLGH- 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GVGVQGRRRGGTPGHHLLPLRSSSSLERG----- 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 AYSERPNRLLRRRVVVDVQPSDSGLPSESGPSSGVPGPGRLPLRNGRVAHQDGPGEGPGC 420
                                                                                                                   28 TSLTFSSYYQHSSPVAAMFIAAYVLIFLLCMVGNTLVCFIVLKNRHMRTVTNMFILNLAV 87
                                                                                                                                                                                                                                                                                                                                         259 -CPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRR----EVLRPLQCWRP-----
                                                                              21 TKETLETQETTSROVASAFI --- VILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA
                                                                                                                                                                                                                                                                                                              ---KHYVLCVVT-IFSIILLAIVALYVRI------
                                                                                                                                                                                                                                                                                                                                                                                           213 -----YCVVRSSHADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLL-DYA-----
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
Query Match 11.8%; Score 213.5; DB 6; Length 432; Best Local Similarity 23.7%; Pred. No. 2.2e-11; Matches 102; Conservative 57; Mismatches 140; Indels 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 11.3%; Score 204.5; DB 6; Best Local Similarity 23.4%; Pred. No. 1.2e-10; Matches 82; Conservative 69; Mismatches 111;
                                                                                                                                                                                                                                                                                                              176 -LEACSTVLPLYA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               338 MHMP-TSPTF 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421 NHMPLTIPAW 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-992-577-6
                                                                                                                                                         78
                                                                                                                                                                                               88
                                                                                                                                                                                                                                      125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 6
                                                                                                                   셤
                                                                                                                                                       ò
                                                                                                                                                                                         g
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
```

```
Sequence 2, Application US/10510018
; Sequence 2, Application US/2050244896A1
; Publication No. US20050244896A1
; GENERAL INFORMATION:
; APPLICANT: GO1z, Stefan
; APPLICANT: Weingemeier, Ulf
; APPLICANT: Weingemeier, Ulf
; TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with
; TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with
; TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated with
; TITLE OF INVENTION: Diagnostics and Therapeutics for Diseases Associated
; TURENT APPLICATION NUMBER: US/10/510,018
; CURRENT FILING DATE: 2004-10-01
; PRIOR FILING DATE: 2003-03-21
; PRIOR FILING DATE: 2003-04-02
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 2
ILENTH: 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                276
                                                                                                                                                                                                                                                                   ----LALLKTVTIVLGVFIVCWLPAF 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116 LSASVFSLLAIAIERHVAIA---KVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---LCVVTIFSIILLAI 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206 VALYVRIYCVVRSSHADMAAPQT------LALLKTVTIVLGVFIVCWLPAF 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116 LSASVFSLLAIAIERHVAIA---KVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNC 172
                                                                                                                                                                                                                                                                                                                                                                                                                   175 ---MSPSAVMLHVQEEKYYRVRLNSQNKTSPVYWCREDWPNQEMRKIYTTVLFANIYLAP 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 NVNDTKGHLYSDINITYVNYYLHQPQVAAIFIISYFLIFFLC--MMGNTVVCFIVMRNKH 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63
63
                                                  18 NVNDTKHHLYSDINITYVNYYLHOPQVAAIFIISYFLIFFLC--MMGNTVVCFIVMRNKH
                                                                                                                                                         ::||||:|:|||::|
231 VAASVFTLVAIAVDRPQCVVYPFKPKL.-TIKTAFVIIMI--IWVLAITI------
10 NPNKVQEH-----YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSK
                                                                                                                   64 FHSAMYLFLGNLAASDLLAGVAFVANTLLS-----GSVTLRLTPVQWFAREGSAFIT
                                                                                                                                                                                                                                                                                                                                                           -----LCVVTIFSIILLAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 NPNKVQEH-----YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 FHSAMYLFLGNLAASDLLAGVAFVANTLLS-----GSVTLRLTPVQWFAREGSAFIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---MSPSAVMLHVQEEKYYRVRLNSQNKTSPVYWCREDWPNQEMRKIYTTVLFANIYLAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     292 TLMMLSDYADLSPNELQIINIYIYPPAHWLAFGNSSVNPIIYGFFNENFRR 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251 SILLL-DYA-CPVHSCPILYKAHYXFA--VSTLNSLLNPVIYTWRSRDLRR 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6; Length 522;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 11.3%; Score 204.5; DB 6; Best Local Similarity 23.4%; Pred. No. 1.6e-10; Matches 82; Conservative 69; Mismatches 111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  206 VALYVRIYCVVRSSHADMAAPQT----
                                                                                                                                                                                                                                                                                                                                                              LGHLEACSTVLPLYAKHYV------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LGHLEACSTVLPLYAKHYV------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens
US-10-510-018-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

S

```
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                               GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Gerald, Christophe P.G.
APPLICANT: Gorald, Christophe P.G.
APPLICANT: Gorald, Christophe P.G.
APPLICANT: Gorald, Christophe P.G.
APPLICANT: Gorald, Christophe P.G.
APPLICANT: Graig, Douglas A.
TITLE OF INVENTION: And Uses Thereof
FILE REFERENCE: 57155-D/JPW
CURRENT APPLICATION NUMBER: US/09/538,036
FRIOR APPLICATION NUMBER: US/09/538,036
FRIOR APPLICATION NUMBER: 09/405,558
FRIOR PILING DATE: 1999-09-24
FRIOR PILING DATE: 1999-09-24
FRIOR APPLICATION NUMBER: 09/255,368
FRIOR PILING DATE: 1999-02-24
FRIOR PILING DATE: 1999-09-25
FRIOR APPLICATION NUMBER: 09/161,113
FRIOR FILING DATE: 1998-09-25
FRIOR FILING DATE: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | || :: || :|| :|| || : || 310 NIYVYPFAHWLAFCNSSVNPIIYGFFNENFRSGFQDAFQFCQKKVKPQEAY----GLRAK 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : | | | : ::: ::: | | | 1.15 RCVVYPPKPK.-----LTVKTAFVMIVIIMGLAITIMTPSAIMLHVQEEKYYRVR 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      194 LSSHNKTSTVYMCREDWPNOEMRRIYTTV-LFATIYLAPLSLIVIMYARIGASLFKTSAH 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253 STGKQRLEQWHVSKKKQKVIKMLLTVAL---LFILSWLPLWTLMMLSDYADLSPNKLRVI 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268 YKAHYXFA--VSTLNSLLNPVIYTWRSRDLR------REVLRPLOCWRPGVGVGR 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80 LLAGVAFVANTLLS-----GSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERH 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 YTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASD 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YMNYYLHQPHVTAVFISSYFLIFFLC--MVGNTVVCFVVIRNRYMHTVTNFFIFNLAISD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132 VAIA---KVKLYGSDKSCRMLLLIGASWLISLVLGGLPIL-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----HADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLL-DYA-CPVHSCPIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---GWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
297
                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 417;
                                     394 TLMMLSDYADLSPNELQIINIYIYPFAHMLAFGNSVNPIIYGFFNENFRR
251 SILLL-DYA-CPVHSCPILYKAHYXFA--VSTLNSLLNPVIYTWRSRDLRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11.0%; Score 199.5; DB 6; 22.7%; Pred. No. 3.2e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74; Mismatches 123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ::| |:| |
RN-----LDINTSGLL---VHEPAS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    316 RRGGTPGHHLLPLRSSSSLERGMHMPTS 343
                                                                                                                                                                                            US-10-992-577-44
; Sequence 44, Application US/10992577
; Publication No. US20050260687A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 22.74
Matches 88; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
   ઠે
```

US-10-502-893-2 ; Sequence 2, Application US/10502893

```
Sequence 118, Application US/10980388
Publication No. US20050255490A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Hebsch, Ronald R.
APPLICANT: Lind, Peter
APPLICANT: Ruff, Valerie
APPLICANT: Ruff, Valerie
APPLICANT: Wood, Lind M.
APPLICANT: Wood, Lind M.
APPLICANT: Wood, Lind S.
TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related Appl
                                                                                                                                                          a New
                                                                                                                                                          and Therapeutics for Diseases Associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83 AMINALYGRWYLARGLCLLWTAFD---VMCCSASILNLCLISLDRYLLILSPLRYKLRMT 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----LK---TVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVST--- 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              279 -LNSLLNPVIYTWRSRDLRREVLRPLQCWR-----PGVGVQGRRRGGTPGHHLLPL 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   310 YCNSTWAPIIYPLFMRDFKRALGRFLPCPRERQASLASPSLRTSHSGPRPG----- 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               146 -CRMLLLIGASWLISLVLGGLP-ILGWNCLGHLE----ACSTVLPLYAKHYVLCVVTI- 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29 VAAALCVVIALTAAANSLLIALICTQPALRNTSNF-----PLVSLFTSDLMVGLVVMPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       257 TKHSRKALKASLTLGILLGMFFVTWLPFFVANIVQAVCDCIS-PGL-----FDVLTWLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 197 FPLPSGAICFTYCRILLAARKQAVQVASLTTGMASQASETLQVPRTPRPGVESADSRRLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87 -VANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35 VASAFIVILCCAIVVENLLVLI----AVARNSKFHSAMYLFLGNLAASDLLAGVAF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 440;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FSIILLAIVALYVRIYCVVRSSHADMA------APQTLAL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.9%; Score 196; DB 6; I 25.5%; Pred. No. 6.7e-10; ative 51; Mismatches 135;
                                          APPLICANT: Bayer HealthCare AG
APPLICANT: Bayer HealthCare AG
APPLICANT: Golz, Stefan
APPLICANT: Bruggemaler, ulf
APPLICANT: Georts, Andreas
TITLE OF INVENTION: Diagnostics and Therapeu
TITLE OF INVENTION: Human 5HT6 Receptor
FILE REFERENCE: LeA 35 827
CURRENT APPLICATION NUMBER: US/10/502,893
CURRENT FILING DATE: 2004-07-27
PRIOR FILING DATE: 2003-01-20
PRIOR PELICATION NUMBER: EP 20201942.8
PRIOR PLILING DATE: 2002-02-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/980,388 CURRENT FILING DATE: 2004-11-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---LSLQQVLPLPLPP 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             329 RSSSSLERGMHMPTSP 344
                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 5
SOFWARE: Patentin version 3.2
SEQ ID NO 2
LENCTH: 440
US20050255529A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-10-502-893-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 96; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 11
US-10-980-388-118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
```

ဖ

```
APPLICANT: Vogeli, Gabriel
APPLICANT: Barodi, Luis A.
APPLICANT: Hiebsch, Ronald R.
APPLICANT: Lind, Peter
               20609/305
                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
CORGANISM: Homo sapiens
US-11-067-884-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  339 H 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-980-388-112
                                                                                                                                                                                                                                                                                                            LENGTH: 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48 VVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFA 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       108 REGSAFITLS-----ASVFSLLAIAIERHVAIAKVKLYGSDKSCRML-LLIGASWL 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        158 ISLVLGGLP------ILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLA 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           205 IVALYVRIYCVVR------SHADMAAPQTLALLKTVTIVLGVFIVCWL 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46 VFGNLLVMTSVI.HFKQLHSPTNFLIASLACADFLVGVTVMLFSM-----VRTVESCWYF 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: BIrod, Don B.
APPLICANT: Xu, Huiping
APPLICANT: Wang, Dean
APPLICANT: Hang, Dean
APPLICANT: Lilion, Karoly
APPLICANT: Lilion, Karoly
APPLICANT: Virag, Tamas
APPLICANT: Virag, Tamas
APPLICANT: Nora
TITLE OF INVENTION: USB
PRIOR APPLICATION NUMBER: US/09/791,932
PRIOR FILING DATE: 2001-02-23
PRIOR FILING DATE: 2000-02-23
PRIOR FILING DATE: 2000-02-23
PRIOR PLICATION NUMBER: 60/184,304
PRIOR PLICATION NUMBER: 60/184,304
PRIOR APPLICATION NUMBER: 60/184,303
PRIOR FILING DATE: 2000-02-23
PRIOR PLICING DATE: 2000-02-23
PRIOR PLICING DATE: 2000-02-23
PRIOR APPLICATION NUMBER: 60/184,247
PRIOR PLICING DATE: 2000-02-23
PRIOR PLICING DATE: 2000-02-23
PRIOR PLICING DATE: 2000-03-13
PRIOR PLICING DATE: 2000-03-13
PRIOR PLICING DATE: 2000-03-11
PRIOR APPLICATION NUMBER: 60/217,369
PRIOR APPLICATION NUMBER: 60/217,369
PRIOR PLICING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 60/217,370
PRIOR APPLICATION NUMBER: 60/217,370
PRIOR PLICING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 60/219,492
PRIOR APPLICATION NUMBER: 60/219,492
PRIOR PLICING DATE: 2000-07-11
PRIOR PLICING DATE: 2000-07-10
PRIOR PLICING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 60/219,492
PRIOR PLICING DATE: 2000-07-11
PRIOR PLICING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 60/219,492
PRIOR PLICING DATE: 2000-07-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | :|:| : | : | : | BYTVDILIDAFMGFLTPAYIYEICCWSAYY-----NSAMNPLIY 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248 PAFSILLLD----YACPVHSCPI-LYKAHYXFAVSTLNSLLNPVIY 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ch 10.2%; Score 184; DB 6; Length 34;
1 Similarity 22.4%; Pred. No. 5.2e-09;
64; Conservative 53; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/11067884
Publication No. US20050261252A1
GENERAL INFORMATION:
APPLICANT: Miller, Duane D.
APPLICANT: Tigyi, Gabor
APPLICANT: Balton, James T.
APPLICANT: Bardar, Vineet M.
APPLICANT: Blrod, Don B.
APPLICANT: Brod, Don B.
APPLICANT: Baker, Daniel L.
APPLICANT: Wang, Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 64; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-980-388-118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-11-067-884-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ. ID NO 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
APPLICANT: Parced, Luis A.
APPLICANT: Hiebsch, Ronald R.
APPLICANT: Hiebsch, Ronald R.
APPLICANT: Hiebsch, Ronald R.
APPLICANT: Hiebsch, Paul S.
APPLICANT: Lind, Peter R.
APPLICANT: Ruff, Valerie
APPLICANT: Wood, Linda S.
TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related Appl FILE REFREENCE: 00325.US1
CURRENT APPLICATION NUMBER: US/10/980,388
CURRENT FILING DATE: 2004-11-02
PRIOR APPLICATION NUMBER: US/09/791,932
PRIOR APPLICATION NUMBER: 60/184,305
PRIOR PILING DATE: 2000-02-23
PRIOR PILING DATE: 2000-02-23
PRIOR FILING DATE: 2000-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94 GSVTLRLTPVQWFAREGSAFITLSA--SVFSLLAIAIERHVAIA----KVKLYGSDKSCR 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           250 SFFIPFLVILYSFMGILNTLRHNALRIHSYPEGICLSQASKLGLMSLQRPFQMSIDMGFK 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310 TRAFTILILFAVFIVCWAP-FTTYSLVATFSKH----FYYQHNFFEISTWLLWLCYLKS 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   365 ALNPLIYYWRIKKFHDACLDWMPKSFKFLPQL------PGHTKRRIRPSAVYVCGE 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 ---TTRWIFGKFFCRVSAMFFWLFVIEGVAILLIISIDRFLIIVQRQDKLNPY----R 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    148 MLLLIGASWLIS-----LVLGG----LPILGWNCL-GHLEACSTVLPLYAKHYVLCVVT 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----T 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         282 LINPVIYTWRSR---DIRREVLRPLQCWRPGVGQRRRGGTPGHHILPLRSSSSLERGM 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           229 LALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVST-----LNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGV---AFVANTLLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      197 IFSIILLAIV------ALYVRIY----CVVRSSHADMAAPQ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
10.2%; Score 184; DB 7; Length 41
Best Local Similarity 25.5%; Pred. No. 6.5e-09;
Matches 92; Conservative 49; Mismatches 132; Indels
CURRENT APPLICATION NUMBER: US/11/067,884
CURRENT FILING DATE: 2005-02-28
PRIOR APPLICATION NUMBER: 60/190,370
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 26
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 112, Application US/10980388
Publication No. US20050255490A1
GENERAL INFORMATION:
```

```
107 AREGSAFITLSASVFSLLAIAIERHVAIA----KVKLYGSDKSCRMLLLIGASWLI--S 159
                                                                                                                                                                                                                                                                                      194 FVTPVLFFYGSNWDSH---CNYFLPSSWEGTAYTVIHFLVGFVIPSVLI1LFYQKVIKXI 250
                                                                                                                                                                                                                                                                                                                                                                                                     251 WRIGIDGRIVRRITMINVPRIKVKIIKMFLILNLLFLLSWLP-FHVAQLWHPHEQDYK--- 306
                                                                                                                                                                                            145 -----QYLTPGVQIYVLLSICIDRFYTIVYPLSFKVSREKAKK------MIAASWIFDAG 193
                                                                                                                                                                                                                                                                                                                                                                       211 -RIYCVVRSSHADM-AAPQT-LALLKTVTIVLGVFIVCWLPAFSILLL-----DYACPV 261
                                                     160 LVLGGLPILGWNCLGHLEACSTVLP-----LYAKHYVLCVVTIFSIILLAI---VALYV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         262 HSCPILYKAHYXFA----VSTLNSLLNPVIYTWRSRDLRREV----LRPLQCWR 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55 LIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    completed: December 4, 2005, 06:42:26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 21.9%;
Matches 62; Conservative 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-821-234-934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search comp
Job time :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                 셤
                                                                                                                                      ઠ
                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 RGYLLLYGTWIVAILQSTPPLYGWGQAAFDERNALCSMIWGASPSYTILSVVSFIVIPLI 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95 SYTLRLTPVQWFAREG--SAFITLS-----ASVFSLLAIAIERHVAIAKVKLYGSDKSCR 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          148 M-LLLIGASWLISLVLGGLPILGWNCLGHLE---ACSTVLPLYAKHYVLCVVTIFSIILL 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35 VASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSG 94
              PRIOR FILING DATE: 2000-02-23

PRIOR PILING DATE: 2000-02-23

PRIOR PELING DATE: 2000-02-23

PRIOR PILING DATE: 2000-02-23

PRIOR PILING DATE: 2000-03-13

PRIOR PILING DATE: 2000-03-13

PRIOR PILING DATE: 2000-03-13

PRIOR PILING DATE: 2000-07-11

PRIOR PILING DATE: 2000-07-11

PRIOR PILING DATE: 2000-07-11

PRIOR PILING DATE: 2000-07-11

PRIOR PILING DATE: 2000-07-12

PRIOR PILING DATE: 2000-07-13

PRIOR PILING DATE: 2000-07-14

PRIOR PILING DATE: 2000-07-14

PRIOR PILING DATE: 2000-07-20

PREMAINING PRIOR APPLICATION NUMBER: 60/218, 492

PRIOR PILING DATE: 2000-07-20

PRIOR PILING DATE: 2000-07-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 LYSEYL------NPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9.3%; Score 167.5; DB 6; Length 508;
44.7%; Pred. No. 2e-07;
ve 48; Mismatches 84; Indels 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 415;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 7.8%; Score 141; DB 6; L
Best Local Similarity 24.5%; Pred. No. 2.7e-05;
Matches 87; Conservative 54; Mismatches 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Charles, Andrew David
APPLICANT: Charles, Andrew David
APPLICANT: Brennand, John Charles
APPLICANT: Brennand, John Charles
APPLICANT: Brennand, John Charles
APPLICANT: Brennand, John Charles
APPLICANTON: Novel Compound
FILE REFERENCE: 1991-221
CURRENT APPLICATION NUMBER: 09/722,342
PRIOR PILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: 60/172,146
PRIOR FILING DATE: 1999-12-17
NUMBER OF SEQ ID NOS: 6
APPLICATION NUMBER: 60/184,397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/10627633 Publication No. US20050250720A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207 VMIACYSVVFCAARRQHA 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204 AIVALYVRIYCVVRSSHA 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin version 3.2 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 24.7%
Matches 49; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
US-10-627-633-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-980-388-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-10-,627-633-2
                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 112
LENGTH: 508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
```

```
Sequence 934, Application US/10821234
; Sequence 934, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
    APPLICANT: Labat, Ivan
; APPLICANT: Application; Susan
; APPLICANT: Tang, Y. Tom
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 81A
; CURRENT PILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR APPLICATION NUMBER: 2003-04-07
; RIOR APPLICATION NUMBER: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: PLE SQ genes Version 1.0
; SEO ID NO 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51 NLLVLIAVARNSKFHSAMYLFLGNLAASDLL--AGVAFVANTLLSGSVTLRLTPVQW-FA 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232 SELCRFVTAAFYCNMYASILLMTVISIDRFLAVVYPMQSLSWRTLGRASFTCLAIWALAI 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155 SWLISLVL--GGLPILGWNCLGHLEACSTVL-----PLYAKHYVLCVVTIFSIILLAIV 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              || | : || : || : || 348 VCYVSIIRCLSSSAVANRSKKSRALFLSAA-VFCIFIICFGPTNVLLIAHYSFLSHT-ST 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108 REGSAFIT-----LSASVFSLLAIAIERHVAIAKV------KLYGSDKSCRMLLLIGA 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207 ALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPI 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        292 AGVVPLVLKEQTIQVPGLN----ITTCHDVLNETLLEGYTAYYFSAFSAVFFFVPLIIST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59; Mismatches 120; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   267 LYKAHYXF----AVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 140; DB 6;
Pred. No. 3.9e-05;
```

Þ

```
241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-771-063-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19, Appl
Sequence 22, Appl
Sequence 9, Appli
Sequence 31, Appl
Sequence 19, Appl
Sequence 19, Appl
Sequence 7, Appl
Sequence 6, Appli
Sequence 46, Appli
Sequence 47, Appli
Sequence 538, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Appli
Sequence 17, Appl
                                                                                                          (without alignments)
1277.002 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, 1
Sequence 4, 1
Sequence 3, 1
                                                                                                                                              US-10-084-507B-17
1806
1 MGSLYSEYLNPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                          4, 2005, 06:23:06 ; Search time 115.5 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                    Published Applications AA Main:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
            GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-084-507B-17
US-09-731-030A-19
US-10-842-316-8
US-09-942-316-8
US-09-941-228-9
US-10-224-504-508
US-10-224-762-19
US-10-323-870-3
US-10-421-828-8
US-10-715-117-7
US-10-715-117-7
US-09-044-099-37
US-09-904-099-37
US-09-764-886-47
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
US-09-764-886-74
                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-993-844-8
US-10-633-438-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-901-772-65
                                                                                                                                                                                                                                                 1867569 segs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                  - protein search, using sw model
                                                                                                                                                                                                                     Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Match Length
                                                                                            December
                                                                                                                                                                                                        BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860.5
858.5
858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854.5
854.5
854.5
                                                                                                                                                                 Perfect score:
                                                                  OM protein
                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                 Searched:
                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                     38, Appl
55760, A
15, Appl
8, Appli
2, Appli
783, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                         Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                               , Appli
2, Appl
, Appli
                                                                                                                                                                                                                                                                                               Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 FSLIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWIISLVLGGLPILGWNCLGHLBACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 FSLLAIAIAIARHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                           Sequence
Sequence
Sequence
                                                                                                                                    Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                             Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
Sequence
                                                                                                        Sequence
                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: DerK. J. Bergsma
APPLICANT: DerK. J. Bergsma
APPLICANT: Nabil Elshourbagy
APPLICANT: Nabil Elshourbagy
APPLICANT: Pamela Lane
APPLICANT: Alactong
APPLICANT: Jeffrey L. Mooney
APPLICANT: Ping Tsui
TITLE OF INVENTION: EDG FAMILY GENE, HUMAN H218
TITLE OF INVENTION: EDG FAMILY GENE, HUMAN H218
CURRENT APPLICATION NUMBER: US/09/771,063
CURRENT FILING DATE: 1998-09-03
PRIOR FILING DATE: 1998-09-03
PRIOR APPLICATION NUMBER: 60/082,776
PRIOR FILING DATE: 1998-04-23
NUMBER OF SEQ ID NOS: 8
SOUTWARE: FastSEQ for Windows Version 3.0
US-11-026-435-8
US-09-971-228-13
US-09-861-455-2
US-09-166-455-14-2
US-09-179-514-2
US-10-097-199-1
US-10-225-567A-237
US-10-225-567A-237
US-10-29-16-72
US-10-49-545A-30
US-10-49-848-38
US-10-498-848-38
US-10-498-848-38
US-10-498-848-38
US-10-498-848-38
US-10-498-848-38
US-10-498-848-38
US-10-498-848-38
US-10-498-971-55760
US-09-971-228-15
US-10-69-971-228-15
US-09-971-228-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match
99.9%; Score 1804; DB 3;
Best Local Similarity 99.7%; Pred. No. 2.7e-156;
Matches 352; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09771063
Patent No. US20010034331A1
GENERAL INFORMATION:
  ORGANISM: HOMO SAPIENS
```

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVI 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPLOCWRPGVGORRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 RPLOCWRPGVGVGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                    301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLBRGWHMPTSPTFLBGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 99.9%; Score 1804; DB 4; Length 353; Best Local Similarity 100.0%; Pred. No. 2.7e-156; Matches 353; Conservative 0; Mismatches 0; Indels
                                                                                                                        Sequence 17, Application US/10084507B

Publication No. US2003005452A1

GENERAL INPORMATION:
APPLICANT: MUNROE, DONALD G.
APPLICANT: MUNROE, DONALD G.
APPLICANT: FETERS, DIANA
APPLICANT: FETERS, DIANA
APPLICANT: GUFTA, ASHWANI K.
TITLE OF INVENTION: AN ISCLAFED HUMAN EDG-4 RECEPTOR
FILE REFERENCE: 108074-00023
CURRENT APPLICATION NUMBER: US/10/084,507B
CURRENT APPLICATION NUMBER: 05/222,995
PRIOR APPLICATION NUMBER: 60/109,885
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-1-35
PRIOR PRILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PACENTIN VET: 2.1
SEQ ID NO 17
LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Leu or Phe
US-10-084-5078-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: MOD RES
LOCATION: (273)
                                                                                                                  US-10-084-507B-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
  ð
                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

US-09-731-030A-19; Sequence 19, Application US/09731030A

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 FSLIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Unknown Organism: Mammalian EDG US-09-731-030A-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 99.8%; Score 1803; DB 3; Length 353; Best Local Similarity 99.4%; Pred. No. 3.4e-156; Matches 351; Conservative 1; Mismatches 1; Indels
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: MUNROE, Donald G
APPLICANT: GUPTA, Ashwani K.
TITLE OF INVENTION: MAMMALIAN EDG-7 RECEPTOR HOMOLOGS
FITLE OF INVENTION: MAMMALIAN EDG-7 RECEPTOR HOMOLOGS
FILE REFERENCE: 8074-0015
CURRENT APPLICATION NUMBER: US/09/731,030A
CURRENT FILING DATE: 1998-12-29
PRIOR APPLICATION NUMBER: 60/070,184
PRIOR APPLICATION NUMBER: 60/070,184
PRIOR APPLICATION NUMBER: 60/070,184
PRIOR PILING DATE: 1997-12-30
NUMBER OF SEQ ID NOS: 21
SEQ ID NO 19
IENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: KAMBOJ, RAJENDER
APPLICANT: FETERS, DIANA
APPLICANT: PETERS, DIANA
APPLICANT: PETERS, DIANA
APPLICANT: WYAS, TEJAL B.
APPLICANT: GUFFA, ASHWANI K.
TITLE OF INVENTION: AN ISOLATED HUMAN EDG-4 REC
TITLE OF INVENTION: AN ISOLATED HUMAN EDG-4 REC
CURRENT PELLION DATE: 2002-08-12
PRIOR APPLICATION NUMBER: 09/22, 995
PRIOR APPLICATION NUMBER: 09/222, 995
PRIOR PILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-10-33
PRIOR FILING DATE: 1998-10-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-084-507B-22
; Sequence 22, Application US/10084507B
; Publication No. US20030054452A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
```

13:16:42 2005

ß

Mon Dec

```
Sequence 9, Application US/09971228
Patent No. US20020155512A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                      APPLICANT: Liao, X. Charlene APPLICANT: Masuda, Esteban
                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 353
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-971-228-9
                                    181
                                                                                241
                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
               121
                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 9
                              8
                                                      엄
                                                                                δ
                                                                                                셤
                                                                                                                           δ
                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                 ö
                                                                                                                                                                                 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                    VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL, 300
                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSKDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFTTLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                              FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVOEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.9%; Score 1787; DB 3; Length 353; larity 99.2%; Pred. No. 9.8e-155; Conservative 0; Mismatches 3; Indels
                                                                                           Length 353
                                                                                                                Indels
                                                                                        Query Match

99.8%; Score 1803; DB 4;
Best Local Similarity 99.4%; Pred. No. 3.4e-156;
Matches 351; Conservative 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/09842316
Patent No. US20020099191A1
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 22
LENGTH: 353
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 350; Conserv
                                                                   US-10-084-507B-22
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 5
US-09-842-316-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-842-316-8
                                                                                                                                                                                                      61
                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                            පු
                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                          셤
                                                                                                                                                                                                   a
                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                ઠે
                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                      ò
```

```
APPLICANT: Chu, beter APPLICANT: Li, Congfen APPLICANT: Li, Congfen APPLICANT: Li, Congfen APPLICANT: Jiang, Yingping APPLICANT: Nigel Pharmaceuticals, Incorporated APPLICANT: Nigel Pharmaceuticals, Incorporated APPLICANT: Nigel Pharmaceuticals, Incorporated APPLICANTION: EDG: Modulators of Lymphocyte Activation and Migration FILE REFERENCE: 021044-000310US CURRENT APPLICATION NUMBER: US 60/284,763 PRIOR FILING DATE: 2002-04-18 PRIOR FILING DATE: 2001-04-18 SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                        VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                 241 VFIVCWLPAFSILLIDYACPUHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADWAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                       RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: human endothelial differentiation G-protein OTHER INFORMATION: coupled receptor (GPCR) 5 (EDG5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 98.9%; Score 1787; DB 3; Best Local Similarity 99.2%; Pred. No. 9.8e-155; Matches 350; Conservative 0; Mismatches 3;
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                         9
                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                         181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                         181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                 121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
98.9%; Score 1787; DB 4; Length 353;
Best Local Similarity 99.2%; Pred. No. 9.8e-155;
Matches 350; Conservative 0; Mismatches 3; Indels
       Length 353
                                               Indels
Score 1787; DB 4;
Pred. No. 9.8e-155;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Bonini, James A.
APPLICANT: Bonini, James A.
APPLICANT: Huang, Ling Yan
APPLICANT: Borowsky, Beth E.
APPLICANT: Salon, John A.
APPLICANT: Wilson, Amy
APPLICANT: Wilson, Amy
APPLICANT: Wilson, Amy
APPLICANT: Wilson, DNA Encoding Edg7 Receptor
TITLE OF INVENTION: DNA Encoding Edg7 Receptor
FILE REFERENCE: 58230-a
CURRENT APPLICATION NUMBER: US/10/228,762
CURRENT APPLICATION NUMBER: US/09/356,315
PRIOR FILING DATE: 1999-07-19
PRIOR FILING DATE: 1999-07-19
PRIOR FILING DATE: 1999-02-22
NUMBER: OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.0 - beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19, Application US/10228762; Publication No. US20030130493A1; GENERAL INFORMATION:
    98.9%;
  Query Match
Best Local Similarity 99.21
Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
US-10-228-762-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-228-762-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 19
LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                셤
                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                               ઠ
                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 508, Application US/10225567A
| Publication No. US20030113798A1
| GENERAL INFORMATION:
| APPLICANT: LifeSpan Biosciences
| APPLICANT: Brown, Joseph P. |
| APPLICANT: Burmer, Glenna C. |
| APPLICANT: Burmer, Glenna C. |
| APPLICANT: Roush, Christian L. |
| TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS |
| TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS |
| TITLE OF INVENTION NUMBER: US/10/225,567A |
| CURRENT APPLICATION NUMBER: 60/257,144 |
| PRIOR FILING DATE: 2000-12-19 |
| NUMBER OF SEQ ID NOS: 2292 |
| SOFTHARE: Patentin version 3.1 |
| LENGTHARE: Patentin version 3.1 |
| LENGTH: 353 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYPFAVSTLNSLLNPUTYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 353;
                                                           Sequence 33, Application US/09904099
| Publication No. US20030119092A1
| GENERAL INFORMATION:
| APPLICANT: Shankar, Geetha
| APPLICANT: Shankar, Geetha
| APPLICANT: Spencer, Juliet V
| TITLE OF INVENTION: CHIMBER OF PROTEIN COUPLED RECEPTORS
| FILE REFERENCE: 10602-013-999
| CURRENT APPLICATION UNDER: US/09/904,099
| CURRENT FILING DATE: 2001-07-11
| NUMBER OF SEQ ID NOS: 38
| SOFTHARE: Patentin Version 3.1
| SEQ ID NO 33
| LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 98.9%; Score 1787; DB 3; Best Local Similarity 99.2%; Pred. No. 9.8e-155; Matches 350; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-099-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
CORGANISM: Homo sapiens
US-10-225-567A-508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
US-10-225-567A-508
                                                 US-09-904-099-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 353;
HILE OF INVENTION: EGG8 RECEPTOR, ITS PREPARATION AND USE TILLE OF INVENTION: EGG8 RECEPTOR, ITS PREPARATION AND USE FILLS OF INVENTION: 38005-147; CURRENT APPLICATION NUMBER: US/10/421,828; CURRENT FILING DATE: 2003-05-08; PRIOR APPLICATION NUMBER: EP 116589.3 PRIOR FILING DATE: 2000-08-01; PRIOR FILING DATE: 2000-08-01; PRIOR FILING DATE: 2000-04-26; NUMBER: PE 108858.2 NUMBER: PE 108858.2 PRIOR FILING DATE: 2000-04-26; NUMBER: PE PED 108958.2 PRIOR FILING DATE: 2000-04-26; NUMBER: PE PED 108958.2 PRIOR FILING DATE: 2000-04-26; NUMBER: PE PED 108959.3 SOFTWARE: PED 10859.3 SOFTWARE: PE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7, Application US/10715117

Sequence 7, Application US/10715117

Bublication No. US20040171037A1

GENERAL INFORMATION:
APPLICANT: LI, JING
APPLICANT: EDWERS, SCOTT
APPLICANT: SIN, WUN CHEX
APPLICANT: YANG, JIANXIN
TITLE OF INVENTION: AMPLIFIED GENES INVOLVED IN CANC
FILE REFERENCE: 38002-0062
CURRENT FILING DATE: 2003-11-18
FRIOR FILING DATE: 2002-11-19
FRIOR PILING DATE: 2002-11-19
FRIOR FILING DATE: 2002-11-19
FRIOR FILING DATE: 2002-12-19
SOFTWARE: PATENTIN NOWBER: 60/434,434
FRIOR FILING DATE: 2002-12-19
SOFTWARE: PATENTIN VET: 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1787; DB 4;
Pred. No. 9.8e-155;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1787; DB 4;
Pred. No. 9.8e-155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; LENGTH: 353
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-715-117-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-421-828-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
US-10-715-117-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/10393870
; Sequence 3, Application US/10393870
; Publication No. US20030219808A1
; GENERAL INFORMATION:
; APPLICANT: KOZIAN, Detlef
; APPLICANT: SIECAER, Karl-Ernst
; APPLICANT: SIECAER, Martina
; APPLICANT: RICARD, Sylvain
; APPLICANT: DELECER, Jacobs, Martina
; APPLICANT: MACE, Sandrine
; APPLICANT: MACE, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                          241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYPFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 VPIVCWLPAFSILLLDYACPVHSCPILYXAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                               241 VPIVCWLPAFSILLLDYACPVHSCPILYXAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MGSLYSEYINPINKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                   RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 98.9%; Score 1787; DB 4; Best Local Similarity 99.2%; Pred. No. 9.8e-155; Matches 350; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8, Application US/10421828
Publication No. US20030219874A1
GENERAL INFORMATION:
APPLICANT: KOSTENSIS, EVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , ORGANISM: Homo sapiens
US-10-393-870-3
                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                             d
                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
```

9

Gaps

ö

ø

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTILLSGSVTLRLTPVQWFARBGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 VFIVCWLPAFSILLIDYACPVHSCPILYKAHYFFAVSTLNSLINPVIYTWRSRDLRREVL 300
241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TVLPLYAKHYVLCVVTIPSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 RPLQCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,
0
                                                                               Score 1783; DB 3; Length 353;
Pred. No. 2.3e-154;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                   Sequence 4, Application US/09771063
Sequence 4, Application US/09771063
Sequence 4, Application US/09771063
Sequence 4, Application US/09771063
Sequence 4, Application Sequence
APPLICANT: Derk J. Bergema
APPLICANT: Pamela Lane
CURRENT: Pillo Tamil Coll-26
PRIOR APPLICATION NUMBER: 09/150,650
PRIOR APPLICATION NUMBER: 09/150,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 21, Application US/10084507B; Publication No. US20030054452A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 98.9%;
Matches 349; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: MUNROE, DONALD G. APPLICANT: KAMBOJ, RAJENDER APPLICANT: PETERS, DIANA APPLICANT: KOOSHESH, FATEMEH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: HOMO SAPIENS
US-09-771-063-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-10-084-507B-21
                                                                                                                                                                                                                               RESULT 14
US-09-771-063-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                   8
                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FSLIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                  FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                       TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFPAVSTLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                              9
                                                                                                                                                                                                                                                                                                              FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.9%; Score 1787; DB 5; Length 353; 99.2%; Pred. No. 9.8e-155; ive 0; Mismatches 3; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Taked Chemical Industries, Ltd.
TITLE OF INVENTION: Method of Analyzing Gene Expression
FILE REFERENCE: PO2-0155PCT
CURRENT APPLICATION NUMBER: US/10/498,848
CURRENT FILING DATE: 2004-06-14
FRIOR PELICATION NUMBER: UP 2001-382053
FRIOR APPLICATION NUMBER: UP 2001-382054
FRIOR FILING DATE: 2001-12-14
FRIOR FILING DATE: 2002-02-14
FRIOR FILING DATE: 2002-02-15
FRIOR FILING DATE: 2002-05-15
FRIOR FILING DATE: 2002-05-15
FRIOR FILING DATE: 2002-05-15
FRIOR FILING DATE: 2002-11-12
FRIOR FILING DATE: 2002-11-12
FRIOR FILING DATE: 2002-11-12
FRIOR FILING DATE: 2002-11-12
FRIOR FILING DATE: 2002-11-13
        3; Indels
        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
US-10-498-848-46
// Sequence 46, Application US/10498848
// Publication No. US20050153289A1
// GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 99.2
Matches 350; Conservative
        350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-498-848-46
                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
        Matches
                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                           ద
                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

180 180 240 240

120

9 9

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 VFIVCWLPAFSILLLDYACPVHSCPILYXAHYXFAVSTLNSLLNPVIYTWRSRDLRREVT, 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 90.0%; Score 1625.5; DB 4; Length Best Local Similarity 89.8%; Pred. No. 5.6e-140; Matches 317; Conservative 13; Mismatches 22; Indels
APPLICANT: VYAS, TEJAL B.
APPLICANT: GUPTA, ASHWANI K.
TITLE OF INVENTION: AN ISOLATED HUMAN EDG-4 RECEPTOR FILE REFERENCE: 108074-00023
CURRENT APPLICATION NUMBER: US/10/084,507B
CURRENT FILING DATE: 2002-08-12
FRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: 60/109,885
PRIOR FILING DATE: 1998-04-03
PRIOR PILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-112-30
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
LENGTH: 352
TWOFT. DDT
                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Rattus sp. US-10-084-507B-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

Search completed: December 4, 2005, 06:42:08 Job time: 117.5 secs



```
Sequence 10, Appli
Sequence 4, Appli
Sequence 12, Appli
Sequence 12, Appli
Sequence 3, Appli
Sequence 2, Appli
Sequence 2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Appl
Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
                                                       4, 2005, 06:10:25 ; Search time 33.5 Seconds (without alignments) 871.180 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                US-10-084-507B-17
1806
1 MGSLYSEYINPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/1/iaa/5_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6_COMB.pep:*
/cgn2_6/ptodata/1/iaa/H_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PcTuS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/RR_COMB.pep:*
/cgn2_6/ptodata/1/iaa/RR_COMB.pep:*
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-582-2004-10

US-09-582-200A-4

US-09-582-200A-12

US-09-731-030A-19

US-09-731-030A-19

US-09-731-030A-19

US-09-774-050-3

US-08-166-9898-2

US-09-169-265-24

US-09-169-265-24

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-024-2

US-09-25-036-47-2

US-09-26-47-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                       S-09-582-200A-2
S-09-582-200A-5
S-09-582-200A-10
                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -09-225-024-4
                                                                                                                                                                     572060 seqs, 82675679 residues
                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                      OM protein - protein search, using sw model
                                                                                                                                        BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                  Issued Patents AA:*
                                                                                                                                                                                                            Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                           December
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 W 4 W 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                        Scoring table:
                                                                                                                      Sequence:
                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                  Database
                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Result
```

Sequence Sequence Sequence Sequence

Sequence Sequence

US-09-542-733-2 US-08-845-566-3 US-08-467-9488-28 US-08-852-824-18 US-08-477-9478-28 US-09-731-030A-17 US-09-518-383-18

836.5 836.5 836.5 836.5 836.5 836.7 836.7 836.7

Sequence Sequence

-09-169-205D-21 CT-US96-10618-4

US-09-082-088-2

Sequence

Sequence

```
US-US-200A-2

Sequence 2, Application US/09582200A

Patent No. 6482609

GENERAL INFORMATION:
APPLICANT: Munroe, Donald G.
APPLICANT: Munroe, Dana
APPLICANT: Munroe, Dana
APPLICANT: Gupta, Ashwani
TITLE OF INVENTION: 1DENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE
TITLE OF INVENTION: 1DENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE
FILE REFERENCE: 106074-00002
CURRENT APPLICATION NUMBER: 09/022,995
PRIOR PILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-30
PRIOR FILING DATE: 1998-13-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                            73, Appl
30, Appl
11, Appl
11, Appl
13, Appl
4, Appli
4, Appli
20, Appli
2, Appli
2, Appli
2, Appli
2, Appli
15, Appli
                                                                                                                                                                                                                                                Sequence 23, Appl
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                           Sequence Sequence Sequence Sequence Sequence Sequence
                                                                                                                                                                                                                Sequence 1
Sequence 2
Sequence 2
                              Sequence
Sequence
Sequence
                                                                                                                                                     Sequence Sequence
                                                                                                                                                                                   Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.9%; Score 1804; DB 2; L nilarity 100.0%; Pred. No. 2.6e-146; Conservative 0; Mismatches 0;
           US-09-169-2050-22
US-09-731-030A-18
US-08-118-270-73
US-08-875-076-30
US-09-731-030A-11
US-09-731-030A-11
US-09-731-030A-13
US-09-731-030A-13
US-09-18-33-4
PCT-US-6-10618-3
US-09-169-2050-20
US-09-169-2050-20
US-09-169-2050-20
US-09-169-2050-20
US-09-169-2050-20
US-09-169-2050-23
US-09-731-030A-15
US-09-731-030A-15
US-09-169-2050-23
US-09-169-2050-23
                                                                                                                                                                                                                                                                                                             ALIGNMENTS
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 353; Conserv
                US-09-582-200A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ଚ
```

```
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Referse, Donald G.
APPLICANT: Kamboj, Rajender
APPLICANT: Recerse, Diana
APPLICANT: Rooshesh, Ratemeh
APPLICANT: Woss, Tejal B.
APPLICANT: Woss, Tejal B.
TILE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE:
TILE REFERENCE: 108074-00002
CURRENT APPLICATION NUMBER: 09/22,995
FRIOR PILING DATE: 1998-12-30
FRIOR APPLICATION NUMBER: 60/109,885
FRIOR APPLICATION NUMBER: 60/109,885
FRIOR FILING DATE: 1998-11-25
FRIOR PILING DATE: 1998-10-25
FRIOR PILING DATE: 1998-10-25
FRIOR APPLICATION NUMBER: 60/00,185
FRIOR APPLICATION NUMBER: 60/00,185
FRIOR APPLICATION NUMBER: 60/070,185
FRIOR APPLICATION NUMBER: 60/0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                              241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                            241 VFIVCWLPAFSILLIDYACPVHSCPILYXAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
       TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNDWKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                   301 RPLQCWRPGVQGRRRGGTPGHHLLPLRSSSSLERGMHWPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 99.9%; Score 1804; DB 2; Length 353; Best Local Similarity 100.0%; Pred. No. 2.6e-146; Matches 353; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; NAME/KEY: misc_feature
; LCCATION: (273)...(273)
; OTHER INFORMATION: "Xaa" represents any amino acid
US-09-582-200A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-582-200A-10
; Sequence 10, Application US/09582200A
; Patent No. 6482609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: human EDG-4 polypeptide
                                                         a
                                                                                                                                                 8
                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Munroe, Donald G.
APPLICANT: Kamboj, Rajender
APPLICANT: Remboj, Rajender
APPLICANT: Remboj, Rajender
APPLICANT: Roceshesh, Fatemen
APPLICANT: Cooplea, Ashwani
Taric Coura: Ashwani
TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE
FILE REFERENCE: 108074-00002
CURRENT APPLICATION NUMBER: US/09/582, 200A
CURRENT APPLICATION NUMBER: 09/222, 995
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-25
PRIOR APPLICATION NUMBER: 60/080, 610
PRIOR PRILOR DATE: 1998-11-25
PRIOR PRILOR DATE: 1998-11-25
PRIOR PRILOR DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1999-11-25
PRIOR PRIOR PRIOR DATE: 1999-11-25
PRIOR DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                       VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQMFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLLIGASWLISLVLGGLDILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                               RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.9%; Score 1804; DB 2; L
100.0%; Pred. No. 2.6e-146;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: misc_feature
; LOCATION: (273)..(273)
OTHER INFORMATION: Unknown Xaa = Leu or Pro
US-09-582-200A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: CONFLICT
LOCATION: (272)...(274)
OTHER INFORMATION: Unknown Xaa = Leu or |
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5, Application US/09582200A
Patent No. 6482609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.(
Matches 353, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                               181
                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                            g
                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
US-09-582-200A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                            Sequence 4, Application US/09582200A

Sequence 4, Application US/09582200A

Patent No. 6482609

GENERAL INFORMATION

APPLICANT: Munree, Donald G.

APPLICANT: Rembej, Rajender

APPLICANT: Gupta, Ashwani

TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE

FILE REFERENCE: 108074-00002

CURRENT APPLICATION NUMBER: US/09/582,200A

CURRENT APPLICATION NUMBER: US/09/582,200A

CURRENT PILING DATE: 1998-12-30

PRIOR FILING DATE: 1998-12-30

PRIOR FILING DATE: 1998-12-30

PRIOR FILING DATE: 1998-12-30

PRIOR FILING DATE: 1998-04-03

PRIOR PILING DATE: 1998-04-03

PRIOR FILING DATE: 1998-12-30

PRIOR FILING DATE: 1998-04-03

PRIOR PELING DATE: 1998-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 PSLLAIAIAERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 TVLPLYAKHYVLCVVTIPSIILLAVVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 RPLOCWRPGVGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHWPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1803; DB 2;
Pred. No. 3.1e-146;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.4%;
Matches 351; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                              US-09-582-200A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-582-200A-4
301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
ò
                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

Sequence 6, Application US/09582200A Patent No. 6482609 GENERAL INFORMATION:

RESULT 5 US-09-582-200A-6

```
APPLICANT: Kamboj, Rajender
APPLICANT: Feters, Diana
APPLICANT: Feters, Diana
APPLICANT: Rooshesh, Fatemeh
APPLICANT: Kooshesh, Fatemeh
APPLICANT: Gupta, Ashwani
TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE
FILE REFERENCE: 108074-00002
CURRENT APPLICATION NUMBER: 09/222, 995
CURRENT APPLICATION NUMBER: 09/222, 995
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 14
SOFWWARE: Patentin version 3.1
SEQ ID NO SEQ ID NOS: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 12, Application US/09582200A
Patent No. 6482609
APPLICANT: Munroe, Donald G.
APPLICANT: Kamboj, Rajender
APPLICANT: Rooshesh, Fatemen
APPLICANT: Gupta, Ashwani
TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY R-
FILE REFERENCE: 108074-00002
CURRENT APPLICATION NUMBER: US/09/582,200A
CURRENT FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: 09/222,995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLBACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVLPLYAKHYVLCVVTIRSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.8%; Score 1803; DB 2; 99.4%; Pred. No. 3.1e-146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 3.1e
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 99.4°
Matches 351; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
US-09-582-200A-6
```

120

9 9

```
181 TVLPLYAKHYVLCVVTIFSIILLAVVALYVRIYCVVRSSHADWAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                       VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                          241 VFIVCWLPAPSILLLDYACPVHSCPILYKAHYLFAVSTLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/09274752D

Patent No. 6812335

GENERAL INFORMATION:

APPLICANT: Goct21, Edward L.

APPLICANT: An, Songzhu

TITLE OF INVENTION: Human Polypeptide Receptors for Lysophospholipids and
TITLE OF INVENTION: Sphingolipids and Nucleic Acids Encoding the Same
FILE REFERENCE: A-67501/DUB/1P1

CURRENT APPLICATION NUMBER: US/09/274,752D

CURRENT FILING DATE: 1999-03-23

NUMBER OF SEQ ID NOS: 29

SOFTWARE: Patentin Ver. 2.0
                                                                                                                                 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAGIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                               MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                    1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                        121 FSLLAIAIBERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                        TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 RPLOCWRPGVGVGRRRGGTPGHHILPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                   RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1760; DB 2;
Pred. No. 1.5e-142;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 347; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
US-09-274-752D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-274-752D-3
                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                      q
                                                                                                        à
                                                                                                                                      g
                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NSKFHSAMYLFLGNLAASDLLAGVAFVANTILLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TVLPLYAKHYVLCVVTI PSI I LLAVVALYVRI Y CVVRSSHADMAAPOTLALLKTVTI VLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Description of Unknown Organism: Mammalian EDG
US-09-731-030A-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                     Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMOLOGS
                                                                                                                                                                                                                                                                                                                                                 Score 1803; DB 2;
Pred. No. 3.1e-146;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.8%; Score 1803; DB 2; 99.4%; Pred. No. 3.1e-146; ive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19, Application US/09731030A
Sequence 10, Application US/09731030A
Sequence No. 6566096
GENERAL INFORMATION:
APPLICANT: MUNROE, Donald G
APPLICANT: GUPTA, ABWARNI K.
APPLICANT: ZASTAMNY, Roman L.
TITLE OF INVENTION: MAMMALIAN EDG-7 RECEPTOR HOM
FILE REFERENCE: 8074-0015
CURRENT APPLICATION NUMBER: US/09/731,030A
CURRENT APPLICATION NUMBER: 60/070,184
PRIOR FILING DATE: 1998-12-29
PRIOR APPLICATION NUMBER: 60/070,184
PRIOR FILING DATE: 1997-12-30
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 353
PRIOR FILING DATE: 1998-12-30
PRIOR APPLICATION NUMBER: PCT/CA98/01195
PRIOR PILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-25
PRIOR APPLICATION NUMBER: 60/080,610
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1998-04-03
PRIOR FILING DATE: 1997-12-30
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PATENTIN VERSION 3.1
                                                                                                                                                                                                                                                                                                                                                     99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.4
Matches 351; Conservative
                                                                                                                                                                                                                                                                                                                                                                                             Matches 351; Conservative
                                                                                                                                                                                                                                                                                      ORGANISM: human EDG-4 #36
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Unknown
                                                                                                                                                                                                                                                                                               ; ORGANISM: DUM:
US-09-582-200A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
US-09-731-030A-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

180 180 240 240 300

```
US-08-760-936-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQMFAREGSAFTTLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIXFVVRSSHADVAGPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFFAFATLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90.0%; Score 1625.5; DB 1; Length 352; 89.8%; Pred. No. 4.6e-131; ive 13; Mismatches 22; Indels 1;
                                                                Sequence 2, Application US/08196989B
Patent No. 5585476
GENERAL INFORMATION:
APPLICANT: MacLennan, A. John
TITLE OF INVENTION: Molecular Cloning and Expression of
TITLE OF INVENTION: G-Protein Coupled Receptors
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/196,989B
FILING DATE: 15-FEB-1994
CLASSIFICATION: 536
ATTONEY/AGENT INFORMATION:
NAME: LLOYd, Jeff
REGISTRATION NUMBER: 35,589
REFRENCE/POCKET NUMBER: MAC-100
TELECOMMUNICATION INFORMATION:
TELEPHONE: 904-375-8100
                                                                                                                                                                                                                     ADDRESSEE: Saliwanchik & Saliwanchik STREET: 2421 N.W. 41st Street, Suite A-1 CITY: Gainesville STATE: FL
                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 904-372-5800
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                            Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 352 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 89.8*
Matches 317; Conservative
                                                                                                                                                                                                                                                                                                                     ZIP: 32606
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-196-989B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYPFAFATLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 NSKEHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 352;
Sequence 2, Application US/08760936

Sequence 2, Application US/08760936

Batent No. 585643

GENERAL INFORMATION:
APPLICANT: MacLennan, A. John
TITLE OF INVENTION: Molecular Cloning and Expression of
CORRESPONDENCE ADDRESS: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
90.0%; Score 1625.5; DB 1; Length
Best Local Similarity 89.8%; Pred. No. 4.6e-131;
Matches 317; Conservative 13; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 32606
COMPUTER READABLE FORM:
MEDIUM TYPE: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,936
FILING DATE: December 6, 1996
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Pace, Doran R.
REFERENCE/POCKET NUMBER: MAC-100C1
TELEPHONE: 352-375-8100
TELEPHONE: 352-375-5800
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
'PMATH. 332 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-09-582-200A-11
; Sequence 11, Application US/09582200A
; Patent No. 6482609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: FI COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-760-936-2
```

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 FSLLAIAIAERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFFRFATLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                      61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                              1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                        1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                      ï
                                                                                                                                                     DB 2; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/09225024
; Patent No. 6518414
; Patent No. 6518414
; GENERAL INFORMATION:
APPLICANT: MacLennan, A. John
TITLE OF INVENTION: G-Protein Coupled Receptors
TITLE OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
ADDRESSEE: Saliwanchik, Lloyd & Saliwanchik
; STREET: 2421 N.W. 418t Street, Suite A-1
; CITY: Ganesville
; STATE: FL.
                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/25,024
FILING DATE: 04-JAN-1999
CLASSIFICATION 1435
PRIOR APPLICATION NUMBER: US/760,936
FILING DATE: 6-DEC-1996
PRIOR APPLICATION NUMBER: 08/196,989
FILING DATE: 15-FEB-1994
ATTORNEY/AGENT INFORMATION:
NAME: Pace, Doran R.
REGISTRATION NUMBER: 38,261
REFERENCE/DOCKET NUMBER: 38,261
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: 352-375-8100
                                                                                                                                                   Query Match 90.0%; Score 1625.5; DB 2; Best Local Similarity 89.8%; Pred. No. 4.6e-131; Matches 317; Conservative 13; Mismatches 22;
; SEQ ID NO 24
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Rattus SP.
US-09-169-205D-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                        à
                                                                                                         APPLICANT: VOSDIBED, FALENCE:
APPLICANT: VASA, Tejal B.
APPLICANT: VASA, Tejal B.
APPLICANT: Gupta, Ashwani
TITLE OF INVENTION: IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN INFLAMMATORY RE
FILER REFERENCE: 108074-00002
CURRENT APPLICATION NUMBER: US/09/582,200A
CURRENT FILING DATE: 2000-07-28
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-12-30
PRIOR FILING DATE: 1998-11-25
PRIOR FILING DATE: 1998-12-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PSILAIAIAIARVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24, Application US/09169205D
Patent No. 648592
Patent No. 648592
APPLICANT: Eriken, James
APPLICANT: Eriken, James
APPLICANT: Kiefer, Michael
TITLE OF INVENTION: ACTIVITY OF AN LPA RECEPTOR
FILE REFERENCE: 252/004
FILE REFERENCE: 252/004
CURRENT FILING DATE: 1998-10-09
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 90.0%; Score 1625.5; DB 2; Length 352; Best Local Similarity 89.8%; Pred. No. 4.6e-131; Matches 317; Conservative 13; Mismatches 22; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT
; ORGANISM: rat EDG-4 polypeptide
US-09-582-200A-11
                       APPLICANT: Munroe, Donald G.
APPLICANT: Kamboj, Rajender
APPLICANT: Peters, Diana
APPLICANT: Kooshesh, Fatemeh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
US-09-169-205D-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
74 KKFHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVF 133
                                                                                                                                                                                                                                           VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRS------SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                      LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW 290
                                              19
                                              3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                     SLIAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                   62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSAFITLSASVF
    Gaps
  12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 46.9%; Score 847; DB 1; Length 383; Best Local Similarity 48.7%; Pred. No. 1.7e-64; Matches 168; Conservative 60; Mismatches 103; Indels
84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: MacLennan, A. John
TITLE OF INVENTION: Molecular Cloning and Expression of
TITLE OF INVENTION: Molecular Cloning and Expression of
TITLE OF INVENTION: G-Frotein Coupled Receptors
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSE: Saliwanchik & Saliwanchik
STREET: 2421 N.W. 41st Street, Suite A-1
CITY: Gainesville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/196,989B
FILING DATE: 15-FEB-1994
CLASSIFICATION: 55
    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
US-08-196-989B-4
; Sequence 4, Application US/08196989B
; Patent No. 5585476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INPORMATION:
NAME: Lloyd, Jeff
REGIGSTRATION NUMBER: 35,589
REFERENCE/DOCKET NUMBER: MAC-:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 904-375-8100
    29,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314 TNKEMRRAFIRIMSC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              291 RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 383 amino acids
TYPE: amino acid
    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 904-372-5800 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         904-372-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-196-989B-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
    160;
                                                                                                                                                                                                                           122
                                                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                        231
    Matches
                                                ò
                                                                                   셤
                                                                                                                                   ò
                                                                                                                                                                      셤
                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: George Livi
APPLICANT: George Livi
APPLICANT: Deffrey Stade1
APPLICANT: Deffrey Stade1
APPLICANT: Minnie Chan
APPLICANT: Minnie Chan
APPLICANT: Minnie Chan
APPLICANT: Raddall Johnson
APPLICANT: Raddall Johnson
APPLICANT: Shalagh Wilson
APPLICANT: Chanbers
APPLICANT: Phillipe Robert
APPLICANT: Phillipe Robert
APPLICANT: Nassirah Khandoudi
APPLICANT: Nassirah
APPLICANTON: INTERACTION THEROP
TITLE OF INVENTION: INTERACTION THEROP
TITLE OF INVENTION: UNWBER: US/09/262,477A
CURRENT APPLICATION NUMBER: 06/077,369
EARLIER FILING DATE: 1998-03-04
EARLIER FILING DATE: 1998-03-04
EARLIER FILING DATE: 1998-03-05-28
NUMBER: OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 FSLLAIAIERQVAIAKVKLYGSDKSCRMLMLIGASMLISLILGGLPILGWNCLDHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALKTVTIVLG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 VFIICWLDAFSILLLDSTCPVRACPVLYKAHYFFRARTLNSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                           61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                   1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TVL.PLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                  ï
                                                                                                                                                                                                         DB 2; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 849; DB 2; Length 382;
Pred. No. 1.2e-64;
                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                    90.0%; Score 1625.5; DB 2; 89.8%; Pred. No. 4.6e-131; ive 13; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/09262477A Patent No. 6423508 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47.0%;
                                                LENGTH: 352 amino acida
TYPE: amino acid
STRANDEDNESS: single
    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                           Best Local Similarity 89.8
Matches 317; Conservative
                           SEQUENCE CHARACTERISTICS
                                                                                          single
                                                                                                              7 TOPOLOGY: linear
7 MOLECULE TYPE: peptide
US-09-225-024-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-262-477-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                         Query Match
```

g

δ 원

셤 ઠે 셤 ઠે 셤 ò 셤 ò

15 SQVSDYGNYDIIVRHYNYTGKLNIGVEKDHGIKLTSVVFILICCLIILENIFVLLTIWKT 74

Search completed: December 4, 2005, 06:24:23 Job time : 35.5 secs

Protein Sequence Searches - February 2005

All of the sequence databases on ABSS have recently been updated.

- Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary accession number.
- If you encounter an accession number from an older search run against UniProt (results file extension .rup) that can no longer be found in the database, the permanent record with the new accession number can be found by searching the old accession number in the UniProt Protein Archive database (UniPARC) at:

http://www.pir.uniprot.org/database/archive.shtml

If you have any questions regarding this information or your results, please contact any STIC searcher.

When submitting sequence search results for scanning into IFW, please include a copy of this attachment to assist any future Examiners or members of the public who may encounter UniProt temporary accession numbers.

١,

```
4, 2005, 06:38:02 ; Search time 152 Seconds (without alignments) 1638.497 Million cell updates/sec
                                                                                                                                                                                                                                               1 MGSLYSEYLNPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                      2166443 segs, 705528306 residues
                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                         Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                    US-10-084-507B-17
1806
                     Copyright
                                                                                                                        December
                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                        Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

seq length: 0 seq length: 200000000

Minimum DB Maximum DB 1: uniprot_sprot:*
2: uniprot_trembl:*

UniProt 05.80:*

Database

SUMMARIES

			d			SUMMAKIES	
Res	Result		Query				
•	No.	O,		Match Length DB	DB DB	מו	Description
¦ .•;·		1804	6.66	353	-	EDGS HUMAN	O95136 homo sapien
	8	1631.5	90.3	352	7	Q8C3Q7 MOUSE	Q8c3q7 m mus muscu
	m	1625.5	0.06	352	-	EDG5 RAT	P47752 rattus norv
	Ž	1625.5	90.0	352	N	Q54AI6_RAT	Q54ai6 rattus norv
	S	1622.5	83.8	352	-	EDGS MOUSE	P52592 mus musculu
	9	966	55.3	370	٦	EDG5 BRARE	
	7	933	51.7	202	7	Q91XR0 CAVPO	Q91xr0 cavia porce
	80	869	48.1	190	~	Q9ESK0_RAT	
	σ	856	47.4			QSR7A1 PONPY	Q5r7al pongo pygma
	10	849	47.0			Q9NYN8_HUMAN	Q9nyn8 homo sapien
	11	847	46.9	383		EDG1 RAT	P48303 rattus norv
	12	847	46.9	383		Q4V7F6 RAT	Q4v7f6 rattus norv
	13	845	46.8	382	~	Q9DC35_MOUSE	Q9dc35 m mus muscu
	14	844	46.7	382		Q5BIP0 BOVIN	Q5bip0 bos taurus
	15	841	46.6	373	~	Q4T9E2_TETNG	Q4t9e2 tetraodon n
	16	839	46.5	382	-	EDG1_MOUSE	Ξ
	17	837	46.3	375	N	Q5U389 BRARE	Q5u389 brachydanio
	18	837	46.3	382	~	Q5E9P3_BOVIN	Q5e9p3 bos taurus
	19	836.5	46.3	381	Н	EDG1_HUMAN	P21453 homo sapien
	50	835	46.2	374			Q6glu6 xenopus lae
	21	822.5	45.5	326		Q99NR8 CASCN	
	22	820.5	45.4	325		Q71BN5_OTOGA	
	23	819	45.3	325		Q9BF55 ARTJA	Q9bf55 artibeus ja
	24	817	45.2	362		EDG1_BRARE	-
	25	816.5	45.2	326		Q6JC76_9EUTH	Q6jc76 solenodon p
	56	816.5	45.2	326		Q9BF73_CONCR	Q9bf73 condylura c
	27	816.5	45.2	326			
	28	816.5	45.2	326		Q99NR4_HYSBR	
	59	816	45.2	326	~	Q8MK87_TADBR	
	30	815.5	45.2	326		Q99NQ7_AGOTA	
	31	814	45.1	326	7	Q99NR1_HETGA	Q99nr1 heterocepha

Q9bf72 sorex arane Q99nq9 hydrochoeru Q99nx3 erethizon d Q9br35 erethizon d Q9bf75 myrmecophag Q9bf76 tamandua te Q9bf79 choloepus h Q99nx5 mus musculu Q99nx5 cavia porce Q99nx9 tamanas stri Q9mx86 megaderma l Q9bf66 elephantulu Q9bf65 orycteropus Q9bf41 panthera on
09BF72_SORAR 099NQ9_HYDHY 099NQ9_HYDHY 099R73_EREDO 09BF74_ERICO 099RF74_ERICO 099RF74_CHOHO 099RF85_CHOHO 099NRS_MOUSE 091XR2_CAVPO 099RF866_ELERU 09BF65_ORYAF
000000000000000
90000000000000000000000000000000000000
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
813.5 813.5 813.5 812.5 812.5 811.5 811.5 809.5 807.5 806.5
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

## ALIGNMENTS

```
PERCE HINDAN

TO STATES, CORDING, STANDARD, PRT; 353 AA.

AC 23-4MR-2004 (Rel. 43) Lear sequence update)

DE 1005156; ORGURG, 147, Lear annocation update)

DE 29-4MR-2004 (Rel. 43) Lear sequence update)

DE 29-4MR-2004 (Rel. 43) Lear annocation update)

DE 29-4MR-2004 (Rel. 43) Lear annocation update)

DE 29-4MR-2004 (Rel. 43) Lear annocation update)

DE 29-4MR-2004 (Rel. 47) Lear annocation update)

Endowhellal and differentiation G-protein coupled receptor 5)

Shingosine 1-phosphate receptor 2) (3192).

SALEASYOFS; Meazors, Chordata, Craniata, Verrebrata, Euteleostomi;

Mammelia, Eutheria, Eutheria, Eutheria, Farattion G-protein coupled receptor 5)

Shingosine 1-phosphate receptor 2) (3192).

NCEL TSISUE-Feetab brain;

RA S., Lear Brain;

Physical Chem. 275:288-296(2000).

RA S., Aronsona R.S., Sharma S.V., Schuler G.D., Aluenber R.D., Collins F.S., Sobberg B., Buetow K.H., Schwere J.B., Schwere R.B., Grouse L.H., Brannon C.W., Schuler G.D., Aluenber R.D., Collins P.S., Worley R.N., Codergren E.J., Lu X., Gibbs R.A., Brownele M.J., Uddin T.B., Toshkywki S., Carninoi P.V., Mallendan J.W., Sobres R.D., Millendu J.W., Sobres R.D., Millendu J.W., Madan A.N., Youndard J.W., Schuler R.M., William D.S., Mullendu J.W., S
```

~

```
[4]
NUCLEOTIDE SEQUENCE.
STRAIN=C57BL/6J; TISSUE=Lung;
                                                                                                                                QBC3Q7_MOUSE PRELIMINARY;
QBC3Q7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                        [1]
NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEOUENCE.
                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hayashizaki Y
                                                                                                                                                01-MAR-2003 (
01-MAR-2003 (
13-SEP-2005 (
                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE
                 181
                                    241
                                                                     301
 181
                                                                                                                         MOUSE
                                                                                                                RESULT 2
                                                                                                                         08C307
              g
                                                   셤
                                                                                     셤
                                                                                                                                  ò
                                                                     8
                                                                   This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
FUNCTION: Receptor for the lysosphingolipid sphingosine 1-bhosphate (SIP). SIP is a bicactive lysophospholipid that elicits diverse physical effect on most types of cells and tissues. When expressed in rat HTC4 hepatoma cells, is capable of mediating SIP-induced cell proliferation and suppression of apoptosis. SUBCELLULAR LOCATION: Integral membrane protein. SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFARGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytoplasmic (Potential).
S-palmitoyl cysteine (By similarit
N-linked (GlcNac. . ) (Potential)
F -> S (in Ref. 1).
G -> V (in Ref. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1804; DB 1; Length 353;
Pred. No. 1.8e-115;
); Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                             5 (Potential).
Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                  Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                            4 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8E37084284ABF7E8 CRC64;
                                                                                                                                                                                                                                                                                                                                                           3 (Potential).
Cytoplasmic (Potential).
                                                                                                                      EMBL; AF034780; AAC98919.1; -; mRNA.
EMBL; AY265688; AAP20652.1; -; Genomic_DNA.
EMBL; BC069598; AAH69598.1; -; mRNA.
Ensembl; ENSG00000175898; Homo saplens.
HGNC; HGNC:3169; EDG5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 1.86
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                7 (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38867 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98.66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 99.7%;
Matches 352; Conservative
                                                                                                                                                                                                                                                                                                                   113
113
318
353 AA;
                                                                                                                                                                                                                                                                                                                                  TOPO DOM
TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                          TRANSMEM
TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                       TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                      TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                       TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                        removed.
 <u>+</u>
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
Rawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., A Arawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburnar M., Batalov S., Casavant T., Fleischmann W., Gasterland T., Gissi C., King B., Kochiwa H., Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J., Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G., Brake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Nurshaw-Boris A., Yoshida K., Wang K.H., Weitz C., Whittaker C., Wilming L., Winshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                               241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTINSLINPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
Mus musculus 13 days embryo lung cDNA, RIKEN full-length enriched
library, clone-0430039A03 product:endothelial differentiation,
sphingolipid G-protein-coupled receptor, 5, full insert sequence
(Endothelial differentiation, sphingolipid G-protein-coupled receptor,
                                                                                                                                                                                     VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Buarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Musnae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=CS7BL/6J; TISSUE=Lung;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                                                                      RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=C57BL/61; TISSUE=Lung;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=C57BL/6J; TISSUE=Lung; The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. 23,
```

```
MEDLINE-200193714, PubMed-11002159; DOT=10.1101/gr.145100;
R. Manningi, P., Shikara Y., Happeren N., Sophara Y., Shikara Y., Happeren N., Sophara Y., Shikara Y., Happeren N., Sophara Y., Shikara Y.,
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                            241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFFAFATLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                         VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                            9
                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
Sphingosine 1-phosphate receptor Eds-5 (SIP receptor Edg-5) (G-protein coupled receptor H218) (AGR16) (Endothelial differentiation G-protein coupled receptor 5) (Sphingosine 1-phosphate receptor 5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Brain, and Lung;
MEDLINE=94373324; PubMed=8087418; DOI=10.1006/mcne.1994.1024;
Maclennan A.J., Browe C.S., Gaskin A.A., Lado D.C., Shaw G.;
Molining and characterization of a putative G-protein coupled receptor potentially involved in development.";
Mol. Cell. Neurosci. 5:201-209(1994).
                                                                                                                                                                                                                                                                                                                                                                                             TVL.PLYAKHYVL.CVVTI FSI I LLAI VALYVRI YCVVRSSHADMAAPQTLALLKTVTI VLG
                                                                                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Buarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                             FSLLAIAIBRHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-93176155; PubMed-8382486;
Okazaki H., Ishizaka N., Sakurai T., Kurokawa K., Goto K., Kumada M.,
                                                                                                                                                            Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Molecular cloning of a novel putative G protein-coupled receptor expressed in the cardiovascular system."; Biochem. Biophys. Res. Commun. 190:1104-1109(1993).
                                                              PROSITE; PS50262; G PROTEIN RECEP F1_2; 1.
G-protein coupled receptor; Receptor; Transducer; Transmembrane.
SEQUENCE 352 AA; 38829 MW; 6A3E426B0FE54406 CRC64;
                                                                                                                                                            ;
                                                                                                                           90.3%; Score 1631.5; DB 2; Length 352; 90.4%; Pred. No. 1.1e-103; ive 12; Mismatches 21; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ź
Pfam; PF00001; 7tm_1; 1.
PRINTS; PR01525; EDGSRECEPTOR.
PRINTS; PR01527; GPCRRHODDPSN.
PRINTS; PR01523; SIPRECEPTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Aortic smooth muscle;
                                                                                                                                               Best Local Similarity 90.4
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         [3]
NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Takuwa Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=Edg5;
                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RAT
                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EDGS RAT
   $ $ $ $ $ $ $ $ $
                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
```

```
RESULT 4
Q54A16_RA
                                                                                                          g
                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOW KRR REPRESENT OF THE PROPERTY OF THE PROPE
                                        ઠે
                                                                                                                                                                   ð
                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the FWBL outstation-the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                                                                                                           PHARMACOLOGICAL CHARACTERIZATION.

You be a subject of the subject of su
                      An S., Bleu T., Huang W., Hallmark O.G., Coughlin S.R., Goetzl E.J.; "Identification of cDNAs encoding two G protein-coupled receptors for IBsosphingolipids."; FEBS Lett. 417:279-282(1997).
  MEDLINE=98072391; PubMed=9409733; DOI=10.1016/S0014-5793(97)01301-X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytoplasmic (Potential).
S-palmitoyl cysteine (By similarity).
N-linked (GlcNAc. . ) (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PRO1525; EDGSRECEPTOR.
PRINTS; PRO1521; GPGRRHODOPSN.
PRINTS; PRO1523; GPRCBTOR.
PROSITE; PRO1523; GPROTEIN RECEP_F1_1; FALSE_NEG.
PROSITE; PSS0262; GPROTEIN RECEP_F1_2; 1.
G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate; Receptor; Transducer; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GO; GO:0004930; E:G-protein coupled receptor activity; IDA. InterPro; IPR004063; EDG5_receptor. InterPro; IPR000276; GPCR_Rhodpsn. InterPro; IPR004061; SIP_receptor. EFR004061; SIP_receptor. PF000001; 7tm_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90.0%; Score 1625.5; DB 1; Length 89.8%; Pred. No. 2.9e-103; tive 13; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
7 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cycoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 (Potential).
Extracellular (Potential).
5 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytoplasmic (Potential). 4 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ensembl; ENSRNOG00000000653; Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AF022138; AAC53494.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U10699; AAA19241.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34
559
1009
1109
1147
1189
2333
255
271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292
352
305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             352 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      68334; Edg5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Σ
O
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RGD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPO
```

```
ï
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTFLQWFAREGSAFITLSASV 120
                                                  180
                                                                                                                                                        240
                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                          VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FSLLAIAIBERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                     TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Aorta;
MEDLINE=33176155; PubMed=8382486;
Okazaki H., Ishizaka N., Sakurai T., Kurokawa K., Goto K., Kumada M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gonda K., Takuwa Y.;
Submitted (Ang-1998) to the EMBL/GenBank/DDBJ databases.
-1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
EMBL; AB016931; BAA32454.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R GO; GO:0016021; C:integral to membrane; IEA.

R GO; GO:001619; F:lysosphingolipid and lysophosphatidic acid . . .;

R GO; GO:000186; P:lysosphingolipid and lysophosphatidic acid . . .;

R GO; GO:000186; P:G-protein coupled receptor protein signalin. . .;

R InterPro; IPR0004063; EDGS receptor.

InterPro; IPR004061; SIP_receptor.

R PFAMP: PR01525; EDGSRECEPTOR.

R PRINTS; PR01523; EDGSRECEPTOR.

R PRINTS; PR01523; SIPRECEPTOR.

R PRINTS; PR01523; SIPRECEPTOR.

R PROSITE; PS50262; G_PROTEIN RECEP F1_2; 1.

R G-protein coupled receptor; Receptor; Transducer; Transmembrane.

G SEQUENCE 352 AA; 38735 WW; 9C933A18E756CEIE CRC64;
                                                                                                                                                                                                                                                                                                                                                                301 RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                        301 RPLLCWRQGKGATG-RRGGNPGHRLLPLRSSSSLERGLHMPTSPTFLEGNTVV 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Molecular cloning of a novel putative G protein-coupled receptor expressed in the cardiovascular system."; Biochem. Biophys. Res. Commun. 190:1104-1109(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90.0%; Score 1625.5; DB 2; Length
89.8%; Pred. No. 2.9e-103;
ative 13; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel. 31, C
(TrEMBLrel. 31, I
(TrEMBLrel. 31, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 317; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q54AI6_RAT PRELIMINARY;
Q54AI6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-SEP-2005 (
13-SEP-2005 (
13-SEP-2005 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Aorta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name=AGR16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Takuwa Y.;
                                                  121
                                                                                                                                                        181
                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGR16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

ï

1; Gaps

9 9 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120

61

1 MGGLYSEYLNPEKVQEHYNYTKETLDMQETPSRKVASAFIIILCCAIVVENLLVLIAVAR

1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR

Best Local Similarity 89.8 Matches 317; Conservative

ठे 쉽 ò

```
301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                            TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                              TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BRARE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8844488
8844488
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WELDINE-SHIESSO, PubMed=8288218;

WHIKIE T.M. Chen Y., Gilbert D.J., Moore K.J., Yu L., Simon M.I.,

WHIKIE T.M. Chen Y., Gilbert D.J., Moore K.J., Yu L., Simon M.I.,

Copeland N.G., Jenkins N.A.;

"Identification, chromosomal location, and genome organization of

"Identification, chromosomal location, and genome organization of

"Identification, chromosomal location, and genome organization of

"Infermion of the second of the second of the second of the succession of the suc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This Swiss-Prot entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use as long as its content is in no way modified and this statement is not
                                                                                                                                                        240
                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                           NSKPHSAMYLFLGNLAASDLLAGVAFVANTLLSGPVTLSLTPLQWFAREGSAFITLSASV 120
                                                   FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P2592; QBR236;
10.0CT-1996 (Rel. 34, Created)
10.0CT-1996 (Rel. 43, Last sequence update)
10.MAY-2005 (Rel. 43, Last sequence update)
10.MAY-2005 (Rel. 47, Last annotation G-protein (Lysophospholipid receptor B2) (Endothelial differentiation G-protein coupled receptor 5) (Sphingosine 1-phosphate receptor 2) (SIP2).

Name=Edg5; Synonyms=Gpcr13, Lpb2;
Name=Edg5; Synonyms=Gpcr13
                                                                                                                                                                                      181 TVLPLYAKHYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALLKTVTIVLG
                                                                                 181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=99132320; PubMed=9931453; DOI=10.1016/S0378-1119(98)00589-7; Zhang G., Contos J.J.A., Weiner J.A., Fukushima N., Chun J.; "Comparative analysis of three murine G-protein coupled receptors activated by spiningosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                                                                                                                                                                                                                                                                                                                                                301 RPLLCWRQGKGATG-RRGGNPGHRLLPLRSSSSLERGLHMPTSPTFLEGNTVV 352
                                                                                                                                                                                                                                                                                                                                                                     RPLOCWRPGVGVGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUCLEOTIDE SEQUENCE, AND TISSUE SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         352 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AF108020; AAD16976.1; -; Genomic_DNA.
EMBL; L20334; AAA16846.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; E48909; E48909.
Ensembl; ENSMUSG00000043895; Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE OF 62-241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene 227:89-99(1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=129/SvJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOUSE
                                                   121
                                                                                                       121
                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                        Š
                                                   ò
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 VFIICWLPAFSILLLDSTCPVRACPVLYKAHYFFAFATLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MGGLYSEYLNPEKVLEHYNYTKETLDMQETTSRKVASAFIIILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         353
 Interpro; IPR004063; EDG5 receptor.
InterPro; IPR004063; EDG5 receptor.
InterPro; IPR004061; S1P_receptor.
InterPro; IPR004061; S1P_receptor.
InterPro; IPR004061; S1P_receptor.
InterPro; IPR001001; 7tm 1; 1.
PRINTS; PR01523; EDG5RECEPTOR.
PRINTS; PR01523; S1PRECEPTOR.
PROSITE; PS00237; GPROTEIN RECEP F1 1; PARTIAL.
PROSITE; PS002037; GPROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Glycoprotein; Dalmitate;
Receptor; Transducer; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                  292 7 (Potential).
352 Cytoplasmic (Potential).
305 S-palmittoyl cysteine (By similarit: 19 N-linked (Glorkc. . .) (Potential) 16 P -> S (In Ref. 2).
307 Q -> K (In Ref. 2).
30871 MW, 9A3E456DD488FE6B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 352;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAR-2004 (Rel. 43, Created)
29-MAR-2004 (Rel. 43, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
Sphingosine 1-phosphate receptor Edg-5 (SIP receptor Edg-5)
(Sphingosine 1-phosphate receptor 2) (SIP2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22; Indels
                                                                                                                                                                                                                               Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
5 (Potential).
Cytoplasmic (Potential).
6 (Potential).
6 (Potential).
Extracellular (Potential).
7 (Potential).
                                                                                                                                                                                                 Extracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 1622.5; DB 1; Pred. No. 4.6e-103; 12; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               370 AA
                                                                                                                                                                                                                      1 (Potential)
GO:0007610; P:behavior; IMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 90.19
Matches 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                     À.
                                                                                                                                                                                                                      35
60
67
67
1129
1129
1148
1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EDGS BRARE
Q918K8;
```

ij

Φ

```
This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         restrictions on
               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           European Bioinformatics Institute. There are no restrictions o as long as its content is in no way modified and this statement
                                                                   NUCLEOTIDE SEQUENCE, AND VARIANTS MIL HIS-150 AND CYS-167.
MEDLINE=20365730; PubMed=10910360; DOI=10.1038/35018092;
Kupperman E., An S., Osborne N., Waldron S., Stainier D.Y.R.;
HA sphingosine-1-phosphate receptor regulates cell migration during vertebrate heart development.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00001; 7tm_1; 1.

PRINTS; PR00642; EDG1RECEPTOR.

PRINTS; PR00237; GPCRRHODOPSN.

PRINTS; PR01523; SIPRECEPTOR.

PROSITE; PS00237; GPROTEIN RECEP_F1_2; 1.

PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.

Disease mutation; G-protein coupled receptor; Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Extracellular (Potential).
1 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential)
3 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lipoprotein; Palmitate; Receptor; Transducer;
          Brachydanio rerio (Zebrafish) (Danio rerio)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AF260256; AAF88001.1; -; mRNA.
Ensembl; ENSDARG0000009719; Danio rerio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZFIN, ZDB-GENE-020123-2; edg5.
InterPro; IPR000987; EDG1receptor.
InterPro; IPR000276; GPCR_Rhodpsn.
InterPro; IPR004061; S1P_receptor.
Pfam; PF00001; 7tm_1; 1.
                                                                                                                      Nature 406:192-195(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57
78
87
108
128
149
167
167
214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPO DOM
TRANSMEM
TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              removed.
```

```
114
                                                                                                                                                                                                                                                                                 TLSASVFSLLAIAIERHVALAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLG 174
                                                                                                                                                                                                                                                                                                                              234
                                                                                                                                                                                                                                                                                                                                                                                                                               54
                                                                                                                                                                                                                                           74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL, AF289992, AAR83087.1; -; mRNA.

GO, GO:0016021; C:integral to membrane; IEA.

GO; GO:001619; F:lysosphingolipid and lysophosphatidic acid . . .; IEA.

GO; GO:0001619; F:receptor activity; IEA.

GO; GO:0007186; F:receptor activity; IEA.

GO; GO:0007165; P:signal transduction; IEA.

InterPro; IPR000463; EDG5 receptor.

InterPro; IPR004063; EDG5 receptor.

InterPro; IPR004061; SIP_receptor.

InterPro; IPR004061; SIP_receptor.

InterPro; IPR004061; AIP_receptor.

PFam; PF00001; 7tm_1; 1.
VTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRD
                                                                                                                                                                                                                     SLYSEYLNPNKVQEHYNYTKE-----TLETQETTSRQVASAFIVILCCAIVVENLLV
                                                                                                                                                                                                                                                                   LIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFI
                                                                                                                                                                                                                                                                                                                                                               175 HLEACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKT
                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DCT-2003 (TrEMBLrel. 25, Last annotation update)
Endothelial differentiation sphingolipid G-protein-coupled receptor
                                                                                                                     R -> C (in mil; allele te273; lack of S1P-mediated signaling).
8C6B3A06DEEA6757 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Fragment).

Cavia porcellus (Guinea pig).

Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;

Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                            73; Indels 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE.
STRAIN-hartley; TISSUE-Myenteric plexus;
Segura B.J., Xiao L., Cowles R.A., Turner D.J., Logsdon C.D.,
Mulholland M.W.;
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                  ; Score 998; DB 1; Length 370;
; Pred. No. 2.4e-60;
51; Mismatches 73; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             LRREVLRPLOCWRPGVGVQGRRRGGTPGHH-LLPLRSSSSLE 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                              370 AA; 41777 MW;
                                                                                                                                                                     55.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q91XRO CAVPO PRELIMINARY;
Q91XRO;
                                                                                                                                                                                 Best Local Similarity 58.5
Matches 200; Conservative
  235
254
275
275
289
310
320
325
150
                                                                                                                      167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10141;
  215
236
236
255
276
290
311
325
150
                                                                                                                      167
                                    TOPO DOM
TRANSMEM
TOPO DOM
LIPID
                                                                                                                                                                                                                                                                                                                                                                                                                                                             295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                     m
                                                                                                                                                                                                                                           17
                                                                                                                                                                                                                                                                   55
                                                                                                                                                                                                                                                                                                                   115
                                                                                                                                                                                                                                                                                                                                                                                                               235
TRANSMEM
TOPO DOM
TRANSMEM
                                                                                                                                              SEQUENCE
                                                                                                                                                                    Query Match
                                                                                                VARIANT
                                                                                                                      VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAVPO
  STEFFFFFFFF
                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                               Š
```

```
An Oustka A., Albert R., Moosmayer P., Schupp I., Wellenreuther R., Moustka A., Albert R., Amid C., Osanger A., Fobo G., Han M., Wiemann S.; Mowes H.W., Weil B., Amid C., Osanger A., Fobo G., Han M., Wiemann S.; Submitted (NOV-2004) to the EWBL/GenBank/Dobb databases.

E. SUBCELLULAR LOCATION: Integral membrane protein (By similarity).

I. SIMILARITY: Belongs to the G-protein coupled receptor 1 family.

EMBL; CR86011; Caintegral to membrane; IEA.

GO; GO:00016021; Cintegral to membrane; IEA.

GO; GO:0001619; F:1ysosphingolipid and lysophosphatidic acid . .; IEA.

RO; GO:0001619; F:1ysosphingolipid and lysophosphatidic acid . .; IEA.

GO; GO:000165; F:receptor activity; IEA.

GO; GO:000165; P:signal transduction; IEA.

CO; GO:000165; P:signal transduction; IEA.

InterPro; IPR00297; EDGIreceptor.

InterPro; IPR0010976; GPCR_Rhodpsn.

InterPro; IPR004061; SIP_receptor.

InterPro; IPR004061; SIP_receptor:

INTERPRO; IPR0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
94 GSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIG 153
                                                                                                                                                                         214 CVVRSSHADMAAPQTLALLXTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYX 273
                                                                                                                                                                                                                                                                                                 121 FVVRSSHADVAGPQTLALLKTVTIVLGVFIICWLPAFSILLLDSTCPVRACPVPXKAHYF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 $SV$DYVNYDIIVRHYNYTGKLNISADKENSIKLTSVVFILICCFIILENIFVLLTIWKT 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pongo pygnaeus (Orangutan).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
                                          3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                  154 ASWLISLVLGGLPILGWNCLGHLBACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PP00001; 7tm 1; 1.

PRINTS; PR00642; EDG1RECEPTOR.

PRINTS; PR001349; EDG2RECEPTOR.

PRINTS; PR01523; GPCRRHODOPSN.

PRINTS; PR01523; S1PRECEPTOR.

PROSTITE; PS010237; GPROTEIN RECEP_F1_1; 1.

G-protein coupled receptor; Hypothetical protein; Receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47.4%; Score 856; DB 2; Length 382; 51.4%; Pred. No. 1.3e-50; ive 58; Mismatches 83; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42773 MW; 6F0841D0E93789CC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-FEB-2005 (TrEMBLrel. 29, Created)
01-FEB-2005 (TrEMBLrel. 29, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
Hypothetical protein DKFZp469M1119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The German cDNA Consortium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ransmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QSR7A1 PONPY PRELIMINARY;
QSR7A1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 51.4
Matches 162; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   274 FAVSTLNSLL 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FAFATLNSLL 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [1]
NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Name=DKFZp469M1119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              382 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transducer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ONPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOW WENT THE PROPERTY OF THE P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                            g
                                                                                                                                             ઠ
                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80 LLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKL 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 LLAGVARIANTLLSGSVTLQLTPVEWFAREGSAF1TLSASVFSLLAIAIERHVAIAKVVL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 YGSDKSCRMLLLIGASWVILLVIGGLPILGWNCIGRLDTCSTVLDLYAKQYVLCVVTIFS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140 YGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFS 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . .; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus (Rat).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 YTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAASD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PRO1525; EDGSRECEPTOR.
PRINTS; PR00237; GPCRRHONDORN.
PRINTS; PR01523; SIPRECEPTOR.
PROSTITE; PS50262; G PROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Receptor; Transmembrane.
   PRINTS; PRO1525; EDGSRECEPTOR.
PRINTS; PR00237; GPCRRHODOPSN.
PRINTS; PR01523; SIPRECEPTOR.
PROSITE; PS00237; GPROTEIN RECEP F1 1; UNKNOWN 1.
PROSITE; PS500262; GPROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Receptor; Transducer; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48.1%; Score 869; DB 2; Length 190; llarity 88.9%; Pred. No. 8.6e-52; Conservative 9; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                          Length 202;
                                                                                                                                                                                                                                                                                                                                               Query Match
51.7%; Score 933; DB 2; Length 20
Best Local Similarity 91.6%; Pred. No. 3.8e-56;
Matches 185; Conservative 9; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              190 190 190 190 MW; 3CA0A5C188E168B1 CRC64;
                                                                                                                                                                                                                                                                                   21836 MW; D9814EC85B42320A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Putative G-protein coupled receptor (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      190 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200 IILLAIVALYVRIYCVVRSSHA 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9ESKO_RAT PRELIMINARY;
                                                                                                                                                                                                                                                    202 2
202 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00001; 7tm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Sim
Matches 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                       NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q9ESKO;
```

셤

ò

ઠ 셤

g

ð

셤

SO THE DESCRIPTION OF THE PROPERTY OF THE PROP

Gaps

```
NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EDG1 RA
P48303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EDG1 RAT
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SC CC CON CONTRACTOR C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A MEDLINE=2238825; PubMed=12477912; DOI=10.1073/pnas.242603899;
A Krausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
A Krausher R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Stapleton M., Soares M.B., Bonaldo M.F., Carninci P., Frange C.,
Brownstein M.J., Usdin T.B., Tooshiyuki S., Carninci P., Frange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McKernan K.J., Malek J.A., Gunzarene P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
A Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rahet J., Helton B., Ketreman M., Madan A., Rodrigues S., Sanchez A.,
Mhiting M., Madan A., Young A.C., Shewchenko Y., Bouffard G.G.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Swalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Swalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Swalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Swalska U., Smailus D.E.,
Butterfield X. S.N., Krzywinski M.I., Swals
                                                                                                                    193
                                                                                                                                                                                                                                                                     194 VLPLYHKHYILFCTTVFTLLLLSIVILYCRIYSLVRTRSRRLTFRKNISKASRSSEKSLA 253
                                                                                                                                                                                                                                                                                                                                                                                                 254 LLKTVIIVLSVPIACWAPLFILLLLDVGCKVKTCDILFRAEYFLVLAVLNSGTNPIIYTL 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Euarchontoglires, Primates, Catarrhini, Hominidae,
                                                                          SHADMAAPQTLA
                                 SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                    LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
G protein-coupled sphingolipid receptor (EDG1 protein) (Endothelial differentiation, sphingolipid G-protein-coupled receptor, 1)
Name=CHEDG1; Synonyms=EDG1; ORFNames=RP4-575N6.1-001;
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Halleck A., Ebert L., Mkoundinya M., Schick M., Eisenstein S., Neubert P., Kstrang K., Schatten R., Shen B., Henze S., Mar W., Korn B., Zuo D., Hu Y., LaBaer J.; Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tigyi G.J. Sr., Wang D. Sr.;
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314 TNKEMRRAFIRIMSC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 291 RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and mouse cDNA sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9NYN8 HUMAN PRELIMINARY;
Q9NYN8; Q9BYY4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEOUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Lund;
                                                                                                                                                                                          182
                                                                                                                                                                                                                                                                                                                                                        231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEW READ TO THE RE
                                                                                               g
                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                      ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
```

```
133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231 LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
Carinam D.;
Carina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 SSVSDYVNYDIIVRHYNYTGKLAISADKENSIKLTSVVFILICCFIILENIFVLLTIWKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |||||||||||: |:||: |:||: |:|||| |:|||:||||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:||:|||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||:||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SLIAIAIAIRHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182 VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRS------SHADMAAPQTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Euarchontoglires, Glires, Rodentia, Sciurognathi;
Muroidea; Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84; Indels 12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1996 (Rel. 33, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
Sphingosine 1-phosphate receptor Edg-1 (Sphingosine 1-phosphate receptor 1) (SIP1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
47.0%; Score 849; DB 2; Length 382;
Best Local Similarity 50.8%; Pred. No. 3.9e-50;
Matches 160; Conservative 59; Mismatches 84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       383 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1996 (Rel. 33, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            291 RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314 TNKEMŘŘAFIŘIMSČ 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
```

```
SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASARIVILCCAIVVENLLVLIAVARN 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and mouse
 m
                              15
                                                         62
                                                                                                                                                                           182
                                                                                                                                                                                                                                     231
                                                                                                                                                                                                                                                                                                                                                                                                 04V7F6
                                                                                                                                                                                                                                                                                                                                                                                                                Q4V7F6
                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
                         g
                                                         ઠે
                                                                                g
                                                                                                                 ò
                                                                                                                                           셤
                                                                                                                                                                           ઠે
                                                                                                                                                                                                  g
                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                      This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                   MEDLINE=95047498; PubMed=7958012; DOI=10.1016/0378-1119(94)90171-6;
Lado D.C., Browe C.S., Gaskin A.A., Borden J.M., Maclennan A.J.;
Lado D.C., Browe C.S., Gaskin A.A., Borden J.M., Maclennan A.J.;
Cloning of the rat edg-1 immediate-early gene: expression pattern
suggests diverse functions.";
Gene 149:331-336(1994)
C.I. FUNCTION: Receptor for the lysosphingolipid sphingosine 1-
phosphate (SIP). SIP is a bioactive lysophospholipid that elicits
diverse physiological effect on most types of cells and tissues.
This inducible epithelial cell G-protein-coupled receptor may be
involved in the processes that regulate the differentiation of
cendothelial cells. Seems to be coupled to the G(i) subclass of
hereromeric G proteins (By similarity).
C.I. SUBCELLULAR LOCATION: Integral membrane protein.
C.I. DEVELOPMENTAL STAGE: First detected at embryonic day 15. At
postnatal day 14 detected in skin, spleen, liver, kidney, heart,
testicle, lung and brain. At adulthood is most abundant in brain.
C.I. SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphoserine (Potential).
S-palmitcyl cysteine (By similarity).
N-linked (GlcNAc. . .) (Potential).
1090BA6AEE09DB4F3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46.9%; Score 847; DB 1; Length 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GO:0004930; F:G-protein coupled receptor activity; T; GO:0004946; P:endothelial cell differentiation; IEP. GO:0010182; P:neuron differentiation; IEP. GO:0019226; P:transmission of nerve impulse; IEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (Potential).
Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 (Potential).
Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7 (Potential).
Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR000987; EDGIreceptor.
InterPro; IPR002277; EDG2_receptor.
InterPro; IPR000276; GPCR_Rhodpsn.
InterPro; IPR004061; SIP_receptor.
PANTHER; PTHR19266:SF5; EDGIreceptor; 1.
Pfam; PF00001; 7tm 1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U10303; AAA83418.1; -; mRNA.
PIR; I53870; I53870.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42746 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           383 AA;
                                             TISSUE=Cerebellum;
   NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                             61958; Edg1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPO DOM
MOD RES
LIPID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPO DOM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u> rrans</u>mem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPO DOM
                                                                                                                                                                                                                                                                                                                                                                                      removed.
```

4.

Gaps

14;

60; Mismatches 103; Indels

Pred. No. 5.3e-50;

48.78;

Best Local Similarity

Matches 168;

Conservative

```
MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altachul R.F., Collins F.S., Wagner L., Shenefer C.F., Bhat N.K.,

Altachul R.F., Jordan H., Moore T., Max S.I., Wang J., Haleh F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,

Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,

Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Rhiting M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,

Rhiting M., Madan A., Young A.C., Shevchenko Y., Boutfard G.G.,

Rodriguez A.C., Grimmood J.W., Genen E.D., Dickson M.C.,

Rotherfield Y.S.N., Krzywinski M.I., Shallus D.E.,

Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

T. "Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LIKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                 122 SILAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                  VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRS------SHADMAAPQTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Euarchontoglires, Glires, Rodentia, Sciurognathi,
Muroidea, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (JUN-2005) to the EMBL/GenBank/DDBJ databases.
--- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
--- SIMILARITY: BELONGS to the G-protein coupled receptor 1 family.
EMBL; BCO97938; AAM97938, 1; -; mRNA.
InterPro; IPR000987; EDGIreceptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-SEP-2005 (TrEMBLrel. 31, Created)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
Endothelial differentiation sphingolipid G-protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    315 TUKEMRRAFIRISCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291 RSRDLRREVLRPLQCWR-PGVGVQGR-RRGGTPGHHLLPLRSSS$ 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RAT PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH MGC Project;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Name=Edgl;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAPO

VATE

VATE
```

```
SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                         SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                    194
                                                                                                                                                                                                                                                                                                                                                          VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRS-----SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                          LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                         74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Mus musculus adult male lung cDNA, RIKEN full-length enriched library,
clone:1200004B16 product:andothelial differentiation sphingolipid G-
protein-coupled receptor 1, full insert sequence (Endothelial
differentiation sphingolipid G-protein-coupled receptor 1).
                                                                                                                                                                                                                           | |:| | : ||||| | : : | : || ||:| |: : | SQVSDYGNYDIIVRHYNYTGKLNIGVEKDHGIKLTSVVFILICCLIILENIFVLLTIWKT
                                                                                                                                                                                                                                                                                                                         ||||||||||: |:|||| | SLLAIAIERYITMLKWKLHNGSNSSRSFLLISACWVISLILGGLPIMGWNCISSLSSCST
                                                                                                                                                                                                                                                                                                                                                                        3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLIALATOR CESTREL/67, TISSUE=LUNG;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"Hinh-efficiency full-length cDNA cloning.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mus inbetata , nvoueza;
Eukaryota; Metezaa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=CS7BL/GJ; TISSUE=Lung, MEDLINE=210855500; MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500; Rawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ighii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
InterPro; IPR002277; EDG2_receptor.
InterPro; IPR000276; GPCR_Rhodpsn.
InterPro; IPR0004061; SIP_receptor.
FERM; PR0001; 7tm 1.
PRINTS; PR00642; EDG1RECEPTOR.
PRINTS; PR00144; EDG2RECEPTOR.
PRINTS; PR01523; SIPRECEPTOR.
PRINTS; PR01523; SIPRECEPTOR.
PROSTIFS; PS00237; GFCTENN RECEP F1_1; 1.
PROSTIFS; PS00245; GFCTENN RECEP F1_2; 1.
G-profein coupled receptor; Receptor; Transmembrane.
SEQUENCE 383 AA; 42746 MM; 090BA6AEE09DB4F3 CRC64;
                                                                                                                                                                                     14;
                                                                                                                                                             Length 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          291 RSRDLRREVLRPLQCWR-PGVGVOGR-RRGGTPGHHLLPLRSSSS 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       315 TNKEMRRAFIRIISCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS 359
                                                                                                                                                        Query Match
46.9%; Score 847; DB 2; Length 38;
Best Local Similarity 48.7%; Pred. No. 5.3e-50;
Matches 168; Conservative 60; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QDC35 MOUSE PRELIMINARY, Q9DC35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEOUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=Edg1;
                                                                                                                                                                                                                                                                                                                                                                                                                                  255
                                                                                                                                                                                                                                    15
                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                   75
                                                                                                                                                                                                                                                                                                           122
                                                                                                                                                                                                                                                                                                                                   135
                                                                                                                                                                                                                                                                                                                                                           182
                                                                                                                                                                                                                                                                                                                                                                                  195
                                                                                                                                                                                                                                                                                                                                                                                                          231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

Radio T., Okazaki Y., Golobori T., Bone D., Kashika T., Salic R., Ashburner M., Betalov S., Casavarr T., Radora M., Watsuda H.A., Sahburner M., Betalov S., Casavarr T., Radora M., Watsuda H.A., Sahburner M., Betalow S., Casavarr T., Radora M., Mario C., King B., Cochisa H., D., Robin P., Lavie S., Marmon Y., Makado T., Radola G., Conceebbund J., Robin P., Lavie S., Marmon Y., Makado T., Papelo G., Conceebbund J., Radora M., Carring J., Carring M., Carring J., Ashador D., Barda M., Difference T., Sakamoch N., Barda M., Danis M., Carring J., Mombarte P., Mariona P., Ring B., Rilly D., Hefenbar G., Prits M., Marazelli J., Mombarte P., Mordone P., Ring B., Rilly D., Hefenbar G., Frylts M., Manaya M., Lee N.H., Oursing C., Ring B., Rillyshald M., Nodriguez I., Sakamoch N., Rodriguez I., Sakamoch N., Rodriguez I., Sakamoch N., Rodriguez I., Sakamoch N., Rodriguez I., Sakamoch N., Marazelli J., Mombarte P., Marazelli J., Mombarte P., Marazelli J., Mombarte P., Mordone P., Marion M., Marazelli J., Mombarte P., Marazelli J., Mombarte P., Marazelli J., Mombarte J., Sakamoch N., Sakamoch M., Sakamoch M.,

```
HID DESCRIPTION OF SECTION OF SEC
                                                                                                                                                                        g
                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                     硆
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-C57BL/6; TISSUE-Eye, and Mouse;

STRAIN-C57BL/6; TISSUE-Eye, and Mouse;

Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RIAUBERG R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RIAUSERG R.L., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Diatchench L., Marusina K.P., Farmer A.A., Rubin G.M., Hong L.,

Diatchench L., Marusina K.P., Farmer A.A., Rubin G.M., Hong L.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Nilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AK004591; BAB23393.1; -; mRNA.
EMBL; BC048094; AAH49094.1; -; mRNA.
EMBL; BC048094; AAH50034.1; -; mRNA.
EMBL; BC051023; AAH51023.1; -; mRNA.
EMBL; BC051023; AAH51023.1; -; mRNA.
EMBL; BC0400045592; Mus musculus.
MGI; MGI:1096355; Edg1.
GO; GO:0016021; C:integral to membrane; TAS.
GO; GO:0001525; P:angiogenesis; IDA.
GO; GO:000193; P:regulation of cell adhesion; IDA.
                                       Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H., Arakana T., Bono H., Carninci P., Fukuda S., Fukunishi Y., Furuno M., Hanagaki T., Bono H., Carninci P., Fukuda S., Fukunishi Y., Furuno M., Hanagaki T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F., Imotani K., Ishii Y., Itoh M., Izawa M., Kasukawa T., Kato H., Kawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C., Matsuyama T., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M., Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sano H., Sasaki D., Shibata K., Shibata Y., Shinagawa A., Shiraki T., Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T., Tejima Y., Toya T., Yammura T., Yasunishi A., Yoshida K., Yoshino M., Muramateu M., Hayashizaki Y., Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A InterPro; IPRO0237; EDG2 receptor.

InterPro; IPRO0227; EDG2 receptor.

InterPro; IPRO0227; EDG2 receptor.

InterPro; IPRO0227; EDG2 receptor.

InterPro; IPRO04061; SIP receptor.

R PANTHER; PTHA19266:SF5; EDG1receptor; 1.

R PANTHER; PRO101; 7tm 1; 1.

R PRINTS; PRO1043; EDG2RECEPTOR.

R PRINTS; PRO1148; EDG2RECEPTOR.

R PRINTS; PRO10523; GPRCHENDOPSN.

R PRINTS; PRO10523; GPRCHENDOPSN.

R PROSITE; PS02237; GPRCHEND RECEP F1 1; UNKNOWN 1.

R PROSITE; PS050421; GPRCHEND RECEP F1 2; 1.

R PROSITE; PS050421; Receptor; Receptor; Transemembrane.

SEQUENCE 332 AA; 42639 MW; SFEAC9A2BD55CB2A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Eye;
Strausberg R.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
STRAIN=C57BL/6; TISSUE=Mouse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE.
                         NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mouse cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

```
SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                                           SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                                        VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRS------SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (WAR-2005) to the EMBL/GenBank/DDBJ databases.
-!- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
-!- SINGLARARIY: Belongs to the G-protein coupled receptor 1 family.
EMBL; BT021184; AAX31366.1; -; mRNA.
EMBL; BT021184; AAX31366.1; -; mRNA.
EMBL; BT021184; AAX3136.1; -; mRNA.
EMBL; BT021184; AAX3136.1; -; mRNA.
GO; GO:001619; F:lysosphingolipid and lysophosphatidic acid . .; IEA.
GO; GO:0004872; F:receptor activity; IEA.
GO; GO:0007186; P:G-protein coupled receptor protein signalin. .; IEA.
                                                                                                                                                                                           73
                                                                                                                                                                 14 SSVSDYGNYDIIVRHYNYTGKINIGABKDHGIKLTSVVFILICCFIILENIFVLLTIWKT
                                                                                                                                3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-MAY-2005 (TrEMBLrel. 30, Created)
10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Endothelial differentiation, sphingolipid G-protein-coupled receptor,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=21180013; PubMed=11282978; DOI=10.1101/gr.170101; Smith T.P.L., Grosse W.M., Freking B.A., Roberts A.J., Stone R.T., Casas B., Waray J.E., White J., Cho J., Pahrenkrug S.C., Bennett G.L., Hearon M.P., Laegreid W.W., Rohrer G.A., Chitko-McKown C.G., Pertea G., Holt I., Karamycheva S., Liang F., Quackenbush J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Harhay G.P., Sonstegard T.S., Van Tassell C.P., Clawson M.L.,
Heaton M.P., Keele J.W., Snelling W.M., Weidmann R.T., Smith T.P.L.;
"Sequencing and analysis of Bos taurus full-length insert CDNA
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus (Bovine).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Laurasiatheria, Cetartiodactyla, Ruminantia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Sequence evaluation of four pooled-tissue normalized bovine cDNA libraries and construction of a gene index for cattle.";
                                                                     14;
         Length 382;
46.8%; Score 845; DB 2; Length 382;
48.7%; Pred. No. 7.3e-50;
ive 60; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           291 RSRDLRREVLRPLQCWR-PGVGVQGR-RRGGTPGHHLLPLRSSSS 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314 TNKEMRRAFIRIVSCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        382 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pecora; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genome Res. 11:626-630(2001).
      Query Match
Best Local Similarity 48.7%
Matches 168; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QSBIPO BOVIN PRELIMINARY;
QSBIPO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Pooled;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Pooled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Keele J.W.;
                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                          122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             clones."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BOVIN
```

```
: 154 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Job time
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search
     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRS-----SHADMAAPQTLA 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VLPLYHKHYILFCTTVFTLLLLAIVILYCRIYSLVRTRSRRLTFRKNISKASRSSEKSLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Maucell E. Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A., Maucell E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A., Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B., Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S., Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B., Blemont C., Skalli Z., Cattolloo L., Poulain J., De Berardinis V., Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J., Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S., Kellis M., Volff JN., Guigo R., Nusbaum C., Kabn D., Robinson-Rechavi M., Lindblad-Toh K., Birren B., Nusbaum C., Kabn D., Robinson-Rechavi M., Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                       InterPro; IPR00227; EDG2 receptor.

InterPro; IPR000207; EDG2 receptor.

InterPro; IPR000207; EDG2 receptor.

InterPro; IPR000217; EDG2 receptor.

InterPro; IPR000217; EDG3 receptor.

R PANYTHER; PR00642; EDG3 RECEPTOR.

R PRINTS; PR0123; SIPRECEPTOR.

R PRINTS; PR0123; SIPRECEPTOR.

R PRINTS; PR0123; SIPRECEPTOR.

R PROSITE; PS00237; G PROTEIN RECEP F1 1; 1.

RR PROSITE; PS00262; G PROTEIN RECEP F1 2; 1.

RA G-protein coupled receptor; Receptor; Transducer; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-2005 (TrEMBLrel. 31, Created)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
Chromosome undetermined SCAF7591, whole genome shotgun sequence.
ORFNames-GSTENG00004794001;
Tetraodon nigroviridis (Green puffer)
Bukaryota, Metazoa, Chroxdata, Craniata, Vertebrata, Buteleostomi;
Actinopterygii, Neopterygii, Teleostei; Euteleostei; Neoteleostei;
Tetradontoidea; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodontiformes;
NCBI_TaxID=99883;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                               Length 382;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86; Indels
                                                                                                                                                                                                                                                                                                                                                                                                            46.7%; Score 844; DB 2;
50.8%; Pred. No. 8.5e-50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               57; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314 SNKEMŘŘAFVŘIMSČ 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                291 RSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 32_TETNG
Q4T9E2_TETNG PRELIMINARY;
Q4T9E2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               160; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
0479E2 TETT
10 13-SE
DT 13-SE
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 IAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNÇLGHLEAÇSTVLPLYAKHYVLC 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               297 REVLRPLQC------WRPGVGVQ-GRRRGGTPGHHLLPLRSSSSLERGMHMPTS- 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74 NLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310 RAFLKTLLCCTACLRPKATFTSPIMGAEFSRSRSDNSSH---PTR----EDGEHSPRGR 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.; "Genome duplication in the teleost fish Terraodon nigroviridis reveals the early vertebrate proto-karyotype."; Nature 431:946-957(2004).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10 ISKHYNYTGKFRKTQEDSGLKADSVVPIIVCCFIILENILVLTTIWRTKKFHKDMYYFIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70 NLALSDILAGVVYTANILLSGANTYKLTPTQWFFREGSMFVALAASVFSLLAIAIERHLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194 VVTIFSIILLAIVALYVRIYCVVR------SSHADMAAPQTLALLKTVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237 IVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   250 IVLSCPIACWAPLFVLLLLDTACQTLSCPILYKAEWFLALAVINSAMVPLIYTLTSNEMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 VQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                     preliminary data.
-!- SUBCELLULAR LOCATION: Integral membrane protein (By similarity)
-!- SUBLERLULAR LOCATION: Integral membrane protein (By similarity)
-!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
EMBL: CAABO1007591; CAF90490.1; -; Genomic_DNA.
InterPro; IPR000276; GPCR_Rhodpsn.
InterPro; IPR004061; S1P_receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PERMY PRO001; 7tm 1; 1.

PRINTS; PR00642; EDGIRECEPTOR.

PRINTS; PR00523; GPERRHODOPSN.

PRINTS; PR01523; SIPRECEPTOR.

PROSITE; PS0262; GPROTEIN RECEP F1 1; 1.

PROSITE; PS50262; GPROTEIN RECEP F1 2; 1.

G-protein coupled receptor; Receptor; Transmembrane.

SEQUENCE 373 AA; 41706 MW; CE779CA9B3D371EB CRC64;
                                                                                                                                                                                                             Genoscope, Whitehead Institute Centre for Genome Research;
Submitted (FB2-2004) to the EMBL/GenBank/DDBJ databases.
-!- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              53; Mismatches 104; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46.6%; Score 841; DB 2; 47.3%; Pred. No. 1.3e-49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               completed: December 4, 2005, 06:52:03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 47.3%
Matches 175; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           362 RTASSGNVTL 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344 PTFLEGNTVV
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

December 4, 2005, 06:38:17 ; Search time 24.5 Seconds (without alignments) 1386.307 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-10-084-507B-17 1806 1 MGSLYSEYLNPNKVQEHYNY......LERGWHMPTSPTFLEGNTVV 353

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 segs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

PIR 80:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		مان			SUMMARIES	
Result No.		. Query Match	Query Match Length	DB	ΙD	Description
-	1625.5	90.0	352	:	JC1465	probable G protein
7	847	46.9	383		153870	Edg-1 orphan recep
e	836.5	46.3	381		A35300	G protein-coupled
4	817.5	45.3	362		JC7559	n.
Ŋ	809	44.8	180		E48909	G protein-coupled
φ	769	42.6	378		JC5245	G protein-coupled
7	504	27.9	364	~	JC5293	lysophosphatidic a
80	352.5	19.5	323	~	\$43850	melanocortin 3 rec
6	349	19.3	362	~	165990	G protein-coupled
10	348.5	19.3	360	7	B46647	
11	347	19.2	330	~	A55689	G protein-coupled
12	340.5	18.9	363	~	S48697	probable G protein
13	338.5	18.7	323	7	836636	melanocortin recep
14	338	18.7	330	N	S40454	G protein-coupled
15	302	16.7	473		A33117	cannabinoid recept
16	300	16.6	325	•	JC2193	melanocortin recep
17	298.5	16.5	332		A57055	melanocortin recep
18	297	16.4	372		I49008	melanocortin-5 rec
19	296.5	16.4	314		S71420	melanocortin 1 rec
20	296.5	16.4	325	•	JC5592	melanocortin 5 rec
21	292.5	16.2	325		JN0764	melanocortin recep
22	292.5	16.2	347		S70364	cannabinoid recept
23	288	15.9	472		817595	cannabinoid recept
24	286	15.8	360		836750	cannabinoid recept
25	285.5	15.8	412		A48978	cep
26	285	15.8	317		S45708	MSH receptor - bov
27	283.5	15.7	314	N	S70005	melanocortin 1 rec
28	മ	15.7	410		A48974	ຕ
29	281.5	15.6	320	7	S18444	G protein-coupled

melanocyte-stimula	melanocyte stimula	A2 adenosine recep	melanocyte-stimula	melanotropin recep	G protein-coupled	alpha-1A-adrenergi	alpha-1A-adrenergi	adrenocorticotropi	adrenocorticotropi	alpha-1-adrenergic	alpha-1A adrenergi	adenosine A2a rece	adrenocorticotropi	5-HT4S receptor -	serotonin 4 recept
S25581	T12055	148095	146416	S29204	D30341	JH0447	139369	152326	JC4046	A40491	A38731	S68247	C43265	S55550	555549
~	N	~	N	~	~	N	~	~	~	~	N	~	~	~	~
				_	٠.	_	~	10	9	L)	0	σ	_	37	90
315	317	409	325	317	412	501	57	29	29	51	56	40	29	ñ	4
										14.7 51		14.4 40			14.2 4
	15.5	15.5	15.1			14.9	14.9		14.8	14.7		14.4	14.3	14.2	14.2

# ALIGNMENTS

	RESULT 1 JC1465 probable G	protein-coupled receptor - rat
	C,Species: Rattus n C,Date: 30-Sep-1993	C,Species: Rattus norvegicus (Norvay rat) Cibate: 30-Sep-193 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
	R;Okazaki, F	C;ACCEBSION: UC1465 YOKazaki, H.; Ishizaka, N.; Sakurai, T.; Kurokawa, K.; Goto, K.; Kumada, M.; Takuwa, Y Biochem Bionbus Res. Commun. 190. 1104-1109. 1993
	A;Title: Moi A;Reference	A;Title: Molecular cloning of a novel putative G protein-coupled receptor expressed in t A;Reference number: JC1465; MUID:93176155; PMID:8382486
	A; Accession: JC1465 A; Molecule type: mRNA	JC1465 ype: mRNA I.J.E.S. AARS
	A; Cross-refe	A; Cross-references: UNIPROT: P47752; UNIPARC: UPI00000007D; GB: AB016931; NID: 93445557; PI
	A; Experiment C; Superfamil	al source: aortic smooth muscle y: G protein-coupled receptor edg-1
	C; Keywords: F;35-59/Dome	C;Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane prot P;35-59/Domain: transmembrane #status predicted <tml></tml>
	F; 67-95/Dome	in: transmembrane #status predicted <tm2></tm2>
	F;110-128/Dc F;148-173/Dc	main: transmembrane #status predicted <im3> main: transmembrane #status predicted <im4></im4></im3>
	F;190-210/Dc	main: transmembrane #status predicted <tm5></tm5>
	F;272-293/DC	Mmain: transmembrane #status predicted <pre></pre>
	F;19/Binding F;142,145,2 F;313/Bindir	ily)Sinding Site: Carbonydrate (ABD), (Covalent) #Beatus Preutice F:142,145,218,219,329,330,331,332(Binding Site: phosphate (Ser) (Covalent) #status predi F;313/Binding site: phosphate (Thr) (Covalent) #status predicted
	Query Match	90.08;
	Best Local Matches 31	Similarity 7; Conservat
	ζ	1 MGSLYSEYINPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR 60
	qq	XETLDMQETPS
	λσ	61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQMFAREGSAFITLSASV 120
_	Db	61 NSKFHSAMYLFLGNLAASDLIAGVAFVANTLLSGPVTLSLTPLONFAREGSAFITLSASV 120
	Ωγ 1:	121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
	15 dO	121 FSLLAIAIERQVAIAKVKLYGSDKSCRMLMLIGASWLISLILGGLPILGWNCLDHLEACS 180
	δ. 13	181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
	Db 18	LLAIVALYVRIYFVVR
•	0y 2,	241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
	Dp 5,	241 VFIICWLPAFSILLIDSTCPVRACPVLYKAHYFFAFATLNSLLNPVIYTWRSRDLRREVL 300

```
sphingosine 1-phosphate receptor - zebra fish
Nyllternate names: endothelial differentiation gene 1 receptor
C;Species: Brachydanio rerio (zebra fish)
C;Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 09-Jul-2004
C;Accession: JC7559
R;Im, Ds.; Ungar, A.R.; Lynch, K.R.
Biochem. Biophys. Res. Commun. 279, 139-143, 2000
A;Title: Characterization of a zebrafish (Danio rerio) sphingosine 1-phosphate receptor A;Reference number: JC7559; MUID: 20563813; PMID:11112429
A;Accession: JC7559
A;Acces
                                           2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 NLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CFIACWAPLFILLILDVACQTLTCSILXKAEWFLALAVLNSAMNPLIYTLTSNEMRRAFI 304
                                                                                                                                                                                                                                                    133
                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                              231
                                                                                                                                                                                                                                                                                                                                                                                                                                         134 IAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLC 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWR 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                                                                                                               73
                                                                                                                                                                                                                                 74 KKFHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVF
                                                                                                                                                                                                                                                                                                       122 SILAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                  S IARHYNFTGKFRKVHKDPGLKADSVVFIIVCCFIILENVLVLLTIWRTKKFHKPMYYFIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65 NIALSDILAGVVYTANILLSGANTYKLTPTQWFFREGSMFVALAASVFSLLAIAIERHLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVOWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194 VVTIFSIILLAIVALYVRIYCVVRSSH------ADMAAPQTLALLKTVTIVLG
                                                                                            3 SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                              VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMA------APQTLAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 VQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Gene: edg1
C;Superfamily: G protein-coupled receptor edg-1
C;Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  45.3%; Score 817.5; DB 2;
45.6%; Pred. No. 1.9e-59;
tive 63; Mismatches 109;
                  Pred. No. 5.7e-61;
; Mismatches 87;
50.0%; Pr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314 NKEMRRAFIRIMSC 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 45.64
Matches 162; Conservative
                al Similarity 50.0 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
                  Local
                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or also fur
C,Genetics
                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                            ò
                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
A35300
G protein-coupled receptor edg-1 - human
C;Species: Homo sapiens (man)
C;Date: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 09-Jul-2004
C;Accession: A35300
R;Hla, T.; Maciag, T.
J. Biol. Chem. 265, 9308-9313, 1990
A;Title: An abundant transcript induced in differentiating human endothelial cells encod A;Reference number: A35300; MUID: 90264425; PMID: 2160972
A;Accession: A35300
A;Molecule type: mRNA
A;Residues: 1-381 <-HLA>
A;Cession: A35300
A;Molecule type: mRNA
A;Residues: 1-381 <-HLA>
A;Cession: A35300
A;Molecule type: mRNA
A;Residues: GDB: 127754; OMIM: 131222
A;Genetics:
C;Genetics:
C;Genetics: C32413-22413
C;Superfamily: G protein-coupled receptor edg-1
C;Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane prot
                                                                                                                                                                                                                                                                                                                                                             dive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIH
                                                                                                                                                                                        Edg-1 orphan receptor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C;Date: 15380.
Gene 149, 331-336, 1994
A;Teference number: 153870; MulD:95047498; PMID:7959012
A;Reference number: 153870
A;Reference number: 153870
A;Residues: 153870
A;Residues: 1-383 «RES>
A;Residues: 1-383 «RES>
A;Cross-references: UNIPROT:P48303; UNIPARC:UP10000129BD0; EMBL:U10303; NID:9595396; IC;Superfamily: G protein-coupled receptor edg-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KKFHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVF 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SLLAIAIERYITMLKWKLHNGSNSSRSFLLISACWVISLILGGLPIMGWNCISSLSSCST 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VLPLYHKHYILPCTTVFTLLLLSIVILYCRIYSLVRTRSRRLTFRKNISKASRSSEKSLA 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTW 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SQVSDYGNYDIIVRHYNYTGKLNIGVEKDHGIKLTSVVFILLCCLIILENIFVLLTIWKT 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SLYSEYLNPNKVQEHYNYT-KETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VLPLYAKHYVLCVVT1FSIILLAIVALYVRIYCVVRS------SHADMAAPQTLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                   352
             14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 381;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   291 RSRDLRREVLRPLQCWR-PGVGVQGR-RRGGTPGHHLLPLRSSSS 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46.9%; Score 847; DB 2; Length 38:
48.7%; Pred. No. 7.9e-62;
tive 60; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THEMREAFIRIISCCKCPNGDSAGKFKRPIIPGMEFSRSKSDNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46.3%; Score 836.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 48.7%;
Matches 168; Conservative
                  301
                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                  ò
                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
a function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:Q92633; UNIPARC:UP10000050403; GB:U80811; NID:g1857424; PID:
C;Superfamily: G protein-coupled receptor edg-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lysophosphatidic acid receptor - human
NyAlternate names: Edg2 protein
NyAlternate names: Edg2 protein
CiSpecies: Homo sapiens (man)
CiDate: 16-Apr-1997 #sequence_revision 09-May-1997 #text_change 09-Jul-2004
CiAccession: JG5293
R;An, S.; Dickens, M.A.; Bleu, T.; Hallmark, O.G.; Goetzl, E.J.
Biochem. Biophys. Res. Commun. 231, 619-622, 1997
A;Title: Molecular cloning of the human Edg2 protein and its identification as A;Reference number: JC5293; MUID:97224397; PMID:9070858
A;Contents: lung
A;Accession: JC5293
A;Accession: JC5293
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-364 <ANAA.
A;Residues: 1-364 <ANA
                                                                                                                                                                                                                    252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 ADFFAGLAYFYLMFNTGPNTRRLTVSTWLLRQGLIDTSLTASVANLLAIAIERHITVFRM 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INCWLPAFSILLIDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVLRP 302
                                                                                                                                                                                                                                                                                                                                   93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             melanocortin 3 receptor - mouse
C;Species: Mus musculus (house mouse)
C;Decies: 27-Jan-1995 #sequence_revision 27-Jan-1995 #text_change 09-Jul-2004
C;Accession: S43850; S37153
R;Desarnaud, F; Labbe, O.; Eggerickx, D.; Vassart, G.; Parmentier, M.
                                              SKKYIAFCISIFTAILVTIVILYARIYFLVKSSSRKVANHNNSERSMALLRTVVIVVSVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSII-LLAIVALYVRIYCVVR-----SSHADMAAPQ-----TLALLKTVTIVLGVFIVC
                                                                                                                                              AKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMA----APQTLALLKTVTIVLGVF
   AIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 YNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVARNSKFHSAMYLFLGNLAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'Match 27.9%; Score 504; DB 2; Length 36 Local Similarity 34.3%; Pred. No. 8.6e-34; Local 116; Conservative 71; Mismatches 121; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               LQCWRPGVGVQGRRRGGTPGHHLL-PLRS-SSSLERGMHMP 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVC---NCLVRGRGARASPIQPALDPSRSKSSSNNSSHSP 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WRPGVGVQGRRRGGTPGHHLLPLRSSSSLER----GMH 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Sim:
Matches 116;
                                                                     133
                                                                                                                                              187
                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                     243
                                                                                                                                                                                                                                                                                                                                                                                                                                               303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         198
127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
   δ
                                                     셤
                                                                                                                                              δ
                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Grotein-coupled receptor - human
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 13-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 09-Jul-2004
C;Date: 13-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 09-Jul-2004
C;Accession: JC5345
R;Yamaguchi, F.; Tokuda, M.; Hatase, O.; Brenner, S.
Biochem. Biophys. Res. Commun. 227, 608-614, 1996
A;Title: Molecular cloning of the novel human G protein-coupled receptor (GPCR) gene map
A;Reference number: JC5245; MUID:97032811; PMID:8878560
A;Reference number: JC5245; MUID:97032811; PMID:8878560
A;Residues: 1-378 «YAM»
A;Genetics: JS «YAM»
A;Genetics: JS A;Apper DA
A;Genetics: A;
                                                                                                                                                                                                                                           Gracian-coupled receptor Gpcr13 - mouse (fragment)
Gracias: Mus musculus (house mouse)
Gracession: E48909
R;Wilkie, T.M.; Chen, Y.; Gilbert, D.J.; Moore, K.J.; Yu, L.; Simon, M.I.; Copeland, N.G
R;Wilkie, T.M.; Chen, Y.; Gilbert, D.J.; Moore, K.J.; Yu, L.; Simon, M.I.; Copeland, N.G
R;Wilkie, T.M.; Chen, Y.; Gilbert, D.J.; Moore, K.J.; Yu, L.; Simon, M.I.; Copeland, N.G
A; Fitle: Identification, chromosomal location, and genome organization of mammalian G-px
A; Reference number: A48909; MUD: 94116980; PMID: 8288218
A; Reference number: A48909
A; Ratus: preliminary; nucleic acid sequence not shown
A; Molecule type: mRNA
A; Residues: 1-180 <WINA
A; Residues: 1-180 <WINA
A; Cross=references: UNIPROT: P52592; UNIPARC; UP10000029470; GB: L20334; NID: 9438786; PIDN: G; Superfamily: G protein-coupled receptor
C; Keywords: G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 SLLAIAIERQVALAKVKLYGSDKSCRMLMLIGASWLISLILGGESILGWNCLNKLEACST 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 SKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVF 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACST 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 AMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAI 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 VQEHYNYT-----KETLETQETTSRQVASAFIVILCCALVVENLLVLIAVARNSKFHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 SKFHSAMYLFLGULAASDLLAGVAFVANTLLSGHVTLSLTPVQWFAREVSAFITLSASVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 VLPLYAKRYVLCVVTIFSVILLAIVALYVRIYFVVRSSHADVAGPQTLALLKTVTIVLGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                              305 KMLNC---GVCVQPSGKFSRP---IMGAEFSTSKSDNSSHPNKDEPEYSPRETIV 353
   301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPT--SPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 42.6%; Score 769; DB 2; Length 378; Local Similarity 47.5%; Pred. No. 1.9e-55; les 162; Conservative 56; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 809; DB 2;
Pred. No. 4.8e-59;
5; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 91.7%;
Matches 165; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Si
Matches 162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
   ઠે
                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

Page

셤

a

ઠે

g à g à g

à

```
Cjaccession: B46647

Rjdantz, I.; Konda, Y.; Tashiro, T.; Shimoto, Y.; Miwa, H.; Munzert, G.; Watson, S.J.; D.
J. Biol. Chem. 268, 8246-8250, 1937

A;Title: Molecular cloning of a novel melanocortin receptor.

A;Reference number: A46647; MUID:93216807; PMID:8463333

A;Accession: B46647

A;Scatus: preliminary; not compared with conceptual translation

A;Molecule type: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G protein-coupled receptor 3 - human
NyAlternate names: G protein-coupled receptor GPR3; orphan G-protein-coupled receptor ACC (Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 03-Mar-1995 #sequence_revision 03-Mar-1995 #text_change 09-Jul-2004
C;Accession: A55689; S58521; C55733
R;Iismaa, T.P.; Kiefer, J.; Liu, M.L.; Baker, E.; Sutherland, G.R.; Shine, J.
Genomics 24, 391-394, 1994
A;Title: Isolation and chromosomal localization of a novel human G-protein-coupled recept A;Reference number: A55689; MUID:95213036; PMID:7698767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
         249 CQVVWRHAHQIALQQHCLAPPHLAATRKGVGTLAVVLGTFGASWLP-FAIY-----CVVG 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             135 AKVKLYGSDKSCR-MLLLIGASWLPSLVLGGLPILGWNCLGHLEACSTVLPLY--AKHYV 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHY -- XFAVSTLNSLLNPVIYTWRSRDLR-- 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192 LCVVTIFSIILLAIVALYVRIYCVVR-----SSHADMAAPQTLALLK---TVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262 -HSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREV-LRPLQCWRPGVGVQGR 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 AGVAFVANTLL----SGSVTLRLTPVQWFAR--EGSAFITLSASVFSLLAIAIERHVAI
                                                                                                                                               303 SHEDPAVY-TYATLLPATYNSMINPIIYAFRNQEIQRALWLLLCGCFQSKVPFRSR 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32 SRQVASAFI-----VILCCAIV--VENLLVLIAVARNSKFHSAMYLFLGNLAASDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 360;
                                                                                                                                                                                                                                                                                                                                      melanocortin receptor 3 - human
C;Species: Homo sapiens (man)
C;Date: 22-Sep-1993 #sequence_revision 18-Nov-1994 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPARC:UPI00001789CB
A;Note: sequence extracted from NCBI backbone (NCBIP:129161)
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19.3%; Score 348.5; DB 2; 33.4%; Pred. No. 4.5e-21; ive 49; Mismatches 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GDB:138780
A;Map position: 20q13.2-20q13.3
C;Superfamily: melanocortin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 33.4%;
Matches 102; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: DNA; mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Residues: 1-360 <GAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     297 -REVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||:|
FREIL 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Gene: GDB: MC3R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                           셤
                                                                                                       ò
                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gprotein-coupled receptor 6 - human
C;Species: Homo sapiens (man)
C;Accession: I65990
B;Helber, M.; Docherty, J.M.; Shah, G.; Nguyen, T.; Cheng, R.; Heng, H.H.Q.; Marchese, A
DNA Cell Biol. 14, 25-35, 1995
A;Tile: Isolation of three novel human genes encoding G protein-coupled receptors.
A;Reference number: I53033; MUID:95134353; PMID:7832990
A;Reference number: 15590
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Redeation: I-362 <RES>
A;Cross-references: UNIPROT:P46095; UNIPARC:UPI00000DA4A; GB:L36150; NID:g598156; PIDN:
C;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
C;Genetics:
A;Genetics:
A;Genetics:
C;Genetics:
C;Genetics:
A;Genetics:
C;Genetics:
C
                                                                                                                                                                                                                                         PII
Biochem. J. 299, 367-373, 1994
A;Title: Molecular cloning, functional expression and pharmacological characterization A;Title: Molecular cloning, functional expression and pharmacological characterization A;Reference number: S43850; MUID:94226597; PMID:8172596
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-323 < DES>
A;Cross-references: UNIPROT:P33033; UNIPARC:UPI0000004010; EMBL:X74983; NID:g400473; PIC;Superfamily: melanocortin receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SETVSLLTV-----GFLVASFAASVSSLLAITVDRYLSLYNALTYYSRRTLLGVHLLLA 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YVRIYCVVR-----SSHADMAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDY 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIAIERHVAIAKVKLYGSDKS-CRMLLLIG 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      154 ASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRIY 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CVVRSSHAD------MAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDYACPV- 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 VILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTL---LSG 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VILCCAIV -- VENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLL----S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLY--AKHYVLCVVTIFSIILLAIVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         267 TCPTNPYCICYTAHFNTYLVLIMCNSVIDPLIYAFRSLELRNTFKEIL 314
                                                                                                                                                                                                                                                                                                                                      Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACPVHSCPILYKAHY -- XFAVSTLNSILNPVIYTWRSRDLR --- REVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53; Mismatches 106; Indels
                                                                                                                                                                                                                                                                                                                               / Match 19.5%; Score 352.5; DB 2; Length Local Similarity 34.0%; Pred. No. 1.9e-21; Nes 98; Conservative 52; Mismatches 93; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19.3%; Score 349; DB 2; 34.1%; Pred. No. 4.1e-21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 34.1%
Matches 101; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    137
                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
```

g

ò

à g ò g

à·

```
RESULT 14
20454
G protein-coupled receptor GPCR21 - mouse C; Species: Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,Gene: MC3-R
C,Superfamily:
C,Keywords: G p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              268
                                   41
                                                                                                                                      95
                                                                                                                                                                                                                                                                                                                                                                                                                                                     263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                               쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                           a
                                                                                                                                    ò
                                                                                                                                                                                  셤
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                   ઠે
A; Residues: 1-330 <IIS>
A; Cross-references: UNIPROT: P46089; UNIPARC: UPI000001624; GB:L32830; GB:L32831; NID:g6G
A; Cross-references: UNIPROT: P46089; UNIPARC: UPI000001624; GB:L32830; GB:L32831; NID:g6G
R; Eggerickx, D; Denef, J.F.; Labbe, O.; Hayashi, Y.; Refetoff, S.; Vassart, G.; Farment
Biochem. J. 309, 837-843, 1995
A; Title: Molecular cloning of an orphan G-protein-coupled receptor that constitutively a
A; Reference number: S58521
A; Residues: Dratiminary; not compared with conceptual translation
A; Residues: UNIPARC: UPI000001624; GB: X83956; NID:g1061125; PIDN: CAAS8787.1; PID
A; Residues: 1.330 <EGG>A; Cross-references: UNIPARC: UPI000001624; GB: X83956; NID:g1061125; PIDN: CAAS8787.1; PID
A; Residues: 1.330 <EGG>A; Cross-references: UNIPARC: UPI00001624; GB: X83956; NID:g1061125; PIDN: CAAS8787.1; PID
A; Reference number: A55733; MUID:95154831; PMID: 7851889
A; Reterence number: A55733; MUID:95154831; PMID: 7851889
A; Residues: 1-292 <AVAR>
A; Residues: 1-292 <AVAR>
A; Residues: 1-292 <AVAR>
A; Residues: UNIPARC: UPI000016A113; GB: U13668; NID:g577416; PIDN: AAA64594.1; PID: C; Genetics:
A; Gene: GDB:GPR3
A; Cross-references: UNIPARC: UPI000016A113; GB: U13668; NID:g577416; PIDN: AAA64594.1; PID: C; Genetics:
A; Gene: GDB:GPR3
A; Cross-references: UNIPARC: UPI000016A113; GB: U13668; NID:g577416; PIDN: AAA64594.1; PID: C; Genetics:
A; Gene: GDB:GPR3
A; Map position: 1p36.1.p34.3
C; Superfamily: melanocortin receptor
C; Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          probable G protein-coupled receptor protein - rat
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 28-OCT-1995 #sequence_revision 03-Nov-1995 #text_change 09-Jul-2004
C;Accession: S48697
R;Song, Z.H.; Young III, W.S.; Brownstein, M.J.; Bonner, T.I.
R;Song, Z.H.; Young III, W.S.; Brownstein, M.J.; Bonner, T.I.
A;Title: Molecular cloning of a novel candidate G protein-coupled receptor from rat brain A;Reference number: S48697; MUID:94364507; PMID:8082799
A;Accession: S48697
A;Accession: S48697
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: mRNA
A;Residues: 1-363 <SON>
A;Cross-references: UNIPROT:P51651; UNIPARC:UP1000112BA34; EMBL:U12006; NID:G551333; PID
C;Superfamily: melanocortin receptor
C;Keywords: G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92 LSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS-CRMLL 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          156 MLALVWGGALGLGLLPVLAWNCLDGLTTCGVVYPLSKNHLVVLAIAFFMVFGIMLQLYAQ 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      151 LIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSI--ILLAIVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         38 AFIVILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFV---ANTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            209 YVRIYCVVRSSHADMAAPQTLAL------LKTVTIVLGVFIVCWLPAFSILLLDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272 A--HS-PPLY-TYLTLLPATYNSMINPIIYAFRNODVQK-VLWAVCC 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 363;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 330;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
19.2%; Score 347; DB 2; Length 33
Best Local Similarity 33.3%; Pred. No. 5.4e-21;
Matches 96; Conservative 49; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 18.9%; Score 340.5; DB 2; Best Local Similarity 34.7%; Pred. No. 2e-20; Matches 96; Conservative 51; Mismatches 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

12;

Gaps

35;

Indels

```
melanocortin receptor 3 - rat
melanocortin receptor 3 - rat
c;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: A48254; S36636
B;Roselli-Rehfuss, L.; Mountjoy, K.G.; Robbins, L.S.; Mortrud, M.T.; Low, M.J.; Tatro, J.
Proc. Natl. Acad. Sci. U.S.A. 90, 8856-8860, 1993
A;Title: Identification of a receptor for gamma melanotropin and other proopiomelanocort
A;Reference number: A48254
A;Accession: A48254
A;Accession: A48254
A;Accession: A48254
A;Accession: A48254
A;Accession: A23 cROS
A;Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        210 VRIYCVVR-----SSHADMAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDYA 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             267
                                                                |:|| : | || || : :|
78 VILCVSGTVIAGENALVVALIASTPALRTPMFVLVGSLATADLLAGCGLILHFVFQYVVP 137
                                                                                                                                                                                                      SVILRLIPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS-CRMLLLIG 153
                                                                                                                                                                                                                                                                 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CVVRSSHAD------MAAPQTLALLK---TVTIVLGVFIVCWLPAFSILLLDYACPVH 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94 GSVTLRLTPVQWFAR--EGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKSCRMLLL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 VFLALGIVSLMENILVILAVVRNGNLHSPMYFFLLSLLQADMLVSLSNSLETIMIVVINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              208 IHMFLFARLHVQRIAALPPADGVAPQQHSCMKGAVTITILLGVFIFCWAPFFLHLVLIIT
VILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLLS---G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41 VILCCAIV -- VENLLYLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFVANTLL----S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       152 IGASWLISLVLGGLPILGWNCLGHLEACSTVLPLY--AKHYVLCVVTIFSIILLAIVALY
                                                                                                                                                                                                                                                                                                                                                                                                            154 ASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CPTNPYCICYTAHFNTYLVLIMCNSVIDPLIYAFRSLEL-RNTFKEILCGCNGMNV 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CPVHSCPILYKAHY--XPAVSTLNSLLNPVIYTWRSRDLRREVLRPLQCWRPGVGV 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2; Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Superfamily: melanocortin receptor;
Keywords: G protein-coupled receptor; transmembrane protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304 SQEDPAIY-TYATLLPATYNSMINPIIYAFRNQEIQR 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S--CPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRR 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 18.7%; Score 338.5; DB 2; Similarity 32.1%; Pred. No. 2.6e-20; 95; Conservative 56; Mismatches 104;
```

```
119 SVFSLLAIAIERHVAI----AKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLG 174
                                                                                                                     261 LQSVCSDIFPLIDETYLMFWIGVTSVLLLFIVYAYMYILWKAHSHAVRMIQRGTQKSIII 320
                                                                                                                                                                                                                                                                                       ------AAPQTLALLKTVTIVLGVFIVCWLPAFSILLLDYACPVHSCPILYK 269
                                                                                                                                                                                    175 HLEACSTVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADM------
                                                                                                                                                                                                                                                                                                                    270 AHYXFA--VSTLNSLLNPVIYTWRSRDLR 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     completed: December 4, 2005, 06:52:57
                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Job time
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                          a
                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                 셤
                                                                         8
                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canabinoid receptor CB1 - rat

Canabinoid receptor CB1 - rat

Canabinoid receptor CB1 - rat

Cipate: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 09-Jul-2004

CjSpecies: Rattus norvegicus (Norway rat)

CjSpecies: Rattus norvegicus (Norway rat)

CjSpecies: A33117; CS5879

R;Matsuda, L.A.; Lolait, S.J.; Brownstein, M.J.; Young, A.C.; Bonner, T.I.

Nature 346, 561-564, 1990

A;Retenence number: A33117; MUD:90332039; PMID:2165569

A;Recession: A33117

A;Nolecule type: mRNA

A;Residues: 1-473 cMA>

A;Coss.references: UNIPROT:P20272; UNIPARC:UPI000012710C; GB:X55812; NID:g1552375; PIDN

R;Shire, D.; Carillon, C.; Kaghad, M.; Calandra, B.; Rinaldi-Carmona, M.; Le Fur, G.; Ca

A;Reference number: A55879; MUD:95181329; PMID:7876112

A;Reterence number: A55879; MUD:95181329; PMID:7876112

A;Retus: prediminary; not compared with conceptual translation

A;Reterences: UNIPARC:UPI00001768D8

A;Retus: prediminary; not compared with conceptual translation

A;Reterences: UNIPARC:UPI00001768D8

C;Keywords: G protein-coupled receptor; glycoprotein; membrane protein
C;Date: 19-May-1994 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C;Accession: $40454
R;Saeki, Y.; Jueno, S.; Mizuno, R.; Nishimura, T.; Fujimura, H.; Nagai, Y.; Yanagihara, T
FEBS Lett. 336, 317-322, 1993
A;Title: Molecular cloning of a novel putative G protein-coupled receptor (GPCR21) which
A;Reference number: $40454
A;Reference number: $40454
A;Accession: $40454
A;Accession: $40454
A;Accession: BANA
A;Molecular type: mRNA
A;Molecule type: mRNA
A;Residues: 1-330 cSAE>
A;Cross-references: UNIPROT:P35413; UMIPARC:UPI0000025C17; GB:D21062; NID:g455487; PIDN:
C;Superfamily: melanocortin receptor; phosphoprotein; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LSGSVTLRLTPVQWFAREGSAFITLSASVFSLLAIAIERHVAIAKVKLYGSDKS-CRMLL 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CIGSPEMSLMLV-----GVLAMAFTASIGSLLAITVDRYLSLYNALTYYSETTVTRTYV 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LIGASWLISLVLGGLPILGWNCLGHLEACSTVLPLYAKHYVLCVVTIFSI--ILLAIVAL 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YVRIYCVVRSSHADMAAPQTLAL------LKTVTIVLGVFIVCWLPAFSILLLDY 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    216 ICRIVC----RHAQQIALQRHLLPASHYVATRKGIATLAVVLGAFAACWLPFTVYCLLGD 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNSKFH-SAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSA 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38 AFIVILCCA---IVVENLLVLIAVARNSKFHSAMYLFLGNLAASDLLAGVAFV---ANTL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NKVQEHYNYTKETLETQE-----TTSRQVASAFI-VILCCAIVVENLLVLIAVA 59
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACPVHSCPILYKAHYXFAVSTLNSLINPVIYTWRSRDLRREVLRPLQC 305
                                                                                                                                                                                                                                                                                                                                                                Length 330;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 473;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 16.7%; Score 302; DB 2; Length 473 Best Local Similarity 28.0%; Pred. No. 3.7e-17; Matches 92; Conservative 58; Mismatches 129; Indels
                                                                                                                                                                                                                                                                                                                                                           / Match 18.7%; Score 338; DB 2; Length 330
Local Similarity 32.3%; Pred. No. 3e-20;
Nes 93; Conservative 50; Mismatches 109; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

نۇ

```
4, 2005, 06:24:31; Search time 130 Seconds (without alignments) 1193.082 Million cell updates/sec
                                                                                                                                                     US-10-084-507B-17
1806
1 MGSLYSEYLNPNKVQEHYNY......LERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                     2443163
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                     2443163 segs, 439378781 residues
                                                                                                                                                                                                                                                                                                                                                                               Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                            OM protein - protein search, using sw model
                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                           genesequ1980s;*
genesequ1990s;*
genesequ2000s;*
genesequ2001s;*
genesequ2001s;*
genesequ2001s;*
genesequ2001s;*
                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Geneseq 21:*
              Copyright
                                                                                            December
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing:
                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                            Run on:
                                                                                                                                                         Title:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Aay28288 Predicted	Aay49904 Human EDG	Aay28289 EDG-4 ami	Aab18889 Amino aci	Abp59285 Human Edg	Abb98694 Human End	Abu08813 Human EDG	Abp82010 Human sph	5 Protei	7 Human	0	1 Human	N	Ado29293 Human GPC	Ado57997 Human EDG	Ado22422 Human G p	Adp88359 Human EDG	Aay49905 Human EDG	Add11249 Human EDG	Adu92079 Human end	Aab03966 Murine ED	Aar58712 Fragment	Aaw01663 p(H218),	Aay05492 Human EDG
SUMMARIES	ID	AAY28288	AAY49904	AAY28289	AAB18889	ABP59285	ABB98694	ABU08813	ABP82010	ADC40485	ADD11247	ADD90760	ADH57161	ADJ62652	AD029293	ADO57997	AD022422	ADP88359	AAY49905	ADD11249	ADU92079	AAB03966	AAR58712	AAW01663	AAY05492
	DB	7	~	~	m	9	9	9	9	7	7	7	æ	ω	æ	80	æ	œ	~	6	σ	m	~	~	7
	Length	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	352	352	352	352
d	Query Match	99.9	6.66	8.66	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.7	98.7	97.2	90.3	90.0	90.0	0.06
	Score	1804	1804	1803	1787	1787	1787	1787	1787	1787	1787	1787	1787	1787	1787	1787	1787	1787	1783	1783	1755	1631.5	1625.5	1625.5	1625.5
	Result No.	-	7	3	4	S	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

A novel isolated lysolipid (LL) receptor/EDG receptor (EDG-4). The LL/EDG receptors are involved in an inflammatory response signaling pathway and an apoptotic signaling pathway. They can be used for identifying agonists or antagonists of NF-KB or IL-8 modulated EDG or LL receptors. Agonists can be used for upregulation of an inflammatory process condition or immune response. Antagonists can be used for the downregulation of an

Claim 7; Fig 16A; 120pp; English.

Rat H218,	LPA recep	Rat lysop	Rat Endot	Human sph	Rat endot	Rat Prote	Murine En	Mouse GPC	-	Chimeric	Human 7 t	Human rep	Human tes	-	•	v	Chimeric	Human Edg		Chimeric
Aaw87790	Aau00305	Abu07712	Abb98696	Abu61816	Adp88361	Add48927	Abb98695	Ado29294	Adp29509	Abp59289	Adg15135	Aam96680	Abb96585	Adg15162	Abp59281	Abp59280	Abp59279	Abg75679	Ado28787	Adx44606
AAW87790	AAU00305	ABU07712	ABB98696	ABU61816	ADP88361	ADD48927	ABB98695	AD029294	ADP29509	ABP59289	ADG15135	AAM96680	ABB96585	ADG15162	ABP59281	ABP59280	ABP59279	ABG75679	AD028787	ADX44606
7	4	9	ø	7	œ	2	9	æ	æ	9	4	4	4	4	ø	9	9	Ŋ	80	σ
352	352	352	352	352	352	353	352	352	377	372	269	274	274	274	384	384	391	362	362	362
90.0	90.0	90.0	90.0	90.0	90.0	90.0	89.8	89.8	83.6	79.3	52.4	52.4	52.4	52.4	47.6	47.5	47.5	47.3	47.3	47.3
1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1622.5	1622.5	1509.5	1432	947	947	947	947	860.5	858.5	858	854.5	854.5	854.5
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

# ALIGNMENTS

RESULT 1

```
New isolated lysolipid/EDG receptor useful in the treatment of asthma and rheumatoid arthritis.
                                                                      EDG-4; polypeptide; receptor; inflammation; amino acid; G protein; lysolipid; immune response.
                                                                                                                                                                                                                                                            Gupta AK;
                                                                                                                                                                                                                                                            Kooshesh F, Vyas TB,
                                                       Predicted polypeptide product from human EDG-4 cDNA
                                                                                                                               /label= unknown
/note= "encoded by YTT"
                                                                                                                                                                                                                                           (ALLX ) ALLELIX BIOPHARMACEUTICALS INC.
                                                                                                               Location/Qualifiers
      AAY28288 standard; protein; 353 AA.
                                                                                                                                                                                                                                                            Peters D,
                                                                                                                                                                                                         97US-0070185P.
98US-0080610P.
98US-0109885P.
                                                                                                                                                                                          98WO-CA001195.
                                      (first entry)
                                                                                                                                                                                                                                                             Kamboj R,
                                                                                                                                                                                                                                                                           WPI; 1999-430392/36.
                                                                                                                Key
Misc-difference
                                                                                                Homo sapiens
                                                                                                                                                         WO9935259-A1
                                                                                                                                                                                          30-DEC-1998;
                                      12-OCT-1999
                                                                                                                                                                                                                   03-APR-1998;
25-NOV-1998;
                                                                                                                                                                                                           30-DEC-1997;
                                                                                                                                                                         15-JUL-1999.
                                                                                                                                                                                                                                                            Munroe DG,
                     AAY28288;
AAY2828
```

Intragenters can also be used for controlling apoptosis in a cell
antigonists can also be used for controlling apoptosis in a cell
comprising the LL/EDG receptor. A diagnostic test for aberrant expression
of HEDG-4 can accelerate diagnosts and proper treatment of abnormal
conditions of e.g. the heart, kidney, lung and testis. Specific examples
of conditions in which aberrant expression of HEDG-4 may play a role
include adult respiratory distress, asthma, rheumatoid arthritis, stroke,
conditions and laratory distress, asthma, rheumatoid arthritis, stroke,
neurotrauma, Alzheimer, a disease, endotoxic shock, psorianis, acute
cordiac ischemia, acute pancreatitis, septic shock, psorianis of the
cyclosporine nephrotoxicity, HIV/AIDS, myelodysplasia, cirrhosis of the
cyclosporine nephrotoxicity, HIV/AIDS, myelodysplasia, cirrhosis of the
cyclosporine exposure to cigarette smoke, asbestos or silica. HEDG-4
cyclosporine exposure to cigarette smoke, asbestos or silica. HEDG-4
cyclosporine agents to treat inflammation or disease including viral,
bacterial or fungal infections, allergic responses, mechanical injury
cassociated with trauma, hereditary diseases, lymphoma or carcinoma, or
cyclosporine which activate the genes of kidney, lung, heart,
cyclosporine apents of the nervous system 121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLLIGASWLISLVLGGLPILGWNCLGHLEACS The agonists and RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLBRGMHMPTSPTFLEGNTVV 353 ö 99.9%; Score 1804; DB 2; Length 353; Best Local Similarity 100.0%; Pred. No. 1.3e-177; Matches 353; Conservative 0; Mismatches 0; Indels inflammatory process condition or immune response. AAY49904 standard; protein; 353 AA Human EDG family H218 protein. (first entry) Sequence 353 AA; 28-JAN-2000 19 61 121 181 241 301 301 Query Match ò 셤 ò 셤 ઠે 셤 ò d ò 셤 8 g

polypeptides 121 셤 ద 셤 ð g ò ò ઠે ö 120 180 180 240 240 VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300 241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300 9 9 Human; EDG family; H218; transmembrane receptor protein; diagnosis; therapy; bacterial; fungal; viral; infection; HIV; cancer; diabetes; obesity; anorexia; bulimia; asthmis Parkinson's disease; hypotension; acute heart failure; hypertension; urinary retention; osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer; asthma; allergy; benign prostatic hypertrophy; migraine; vomiting; psychotic; neurological disorder; dyshinesia. 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV FSLLAIAIBRHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG Gaps

120 120 180 180 240 240

> 301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353 RPLQCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353

301

ò d

Homo sapiens WO9954351-A1

28-OCT-1999

9 9

The present sequence is a numeral process. The present sequence or activity of H218 by determining the presence or advanced or activity of H218 by determining the presence or absence of mutation in the polymucleotide encoding H218 in the genome of the subject and/or analysing for the presence of H218 expression in sample derived from the subject. It is also used for treating subjects in need of enhanced activity or inhibition of H218 by administering an agonist or antagonist respectively. H218 can be used to treat abnormal conditions such as bacterial, fungal and viral infections, particularly HV-10 c. 2, cancers, diabetes, obesity, anorexia, bullimia, asthma, Parkinson's disease, actue heart failure, hypotension, hypertension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, circle, ulcers, asthma, allergies, benign prosetatic hypertrophy, mybridisation probes and primers for isolating full-length clones concoling H218. The difference in cDNA or genomic sequence between affected and unaffected individuals is determined to identify mutation causing the disease. It is also valuable for chromosome identification. The polypeptide is used for the identification of membrane bound or causing the disease through standard receptor binding techniques and also controlled the ecceptors through standard receptor binding techniques and also controlled the process of the controlled to inhibitor of the VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300 241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300 present sequence is a human EDG family protein designated H218. H218 61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS Gaps Novel human transmembrane receptor protein for use in treatment and ä ö Tsui Length 353; Indels Mooney JL, Score 1804; DB 2; Pred. No. 1.3e-177; 0; Mismatches 1; Li X, Bergsma DJ, Elshourbagy N, Lane P, (SMIK ) SMITHKLINE BEECHAM CORP. Claim 1; Page 29; 49pp; English. 99.9%; 98US-00150650 99WO-US008099 98US-0082776P Query Match Best Local Similarity 99.7 Matches 352; Conservative diagnosis of disease. WPI; 1999-633972/54. N-PSDB; AAZ32488 Sequence 353 AA; 14-APR-1999; 23-APR-1998; 03-SEP-1998; 241 ò d

240

TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG

FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS

180

```
61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                         121
                                                                                                                      181
                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                       d
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                셤
                                        ò
                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A novel isolated lysolipid (LL) receptor/EDG receptor (EDG-4). The LL/EDG receptors are involved in an inflammatory response signaling pathway and an apoptotic signaling pathway. They can be used for identifying agonists or antagonists of NR-NB or IL-8 modulated EDG or LL receptors. Agonists or antagonists of NR-NB or IL-8 modulated EDG or LL receptors. Agonists or immune response. The downregulation of an inflammatory process condition or immune response. The agonists and inflammatory process condition or immune response. The agonists and inflammatory process condition or immune response. The agonists and expression of antagonists can also be used for controlling apoptosis in a cell comprising the LL/EDG receptor. A diagnostic test for aberrant expression of HEDG-4 can accelerate diagnosis and proper treatment of abnormal of conditions of e.g. the heart, Kidney, lung and testis. Specific examples of conditions in which aberrant expression of HEDG-4 may play a role include adult respiratory distress, asthma. Theumatorid arthritis, stroke, neurotrauma, Alzheimer's disease, anthma. Theumatorid arthritis, stroke, cardiac ischemia, acute pancreatitis, septic shock, psoriasis, cutte cyclosporine nephrotoxicity, HUV/AIDS, myelodysplasia, cirrhosis of the liver, and early diabetic glomerulopathy, as well as lung damage cyclosporine nephrotoxicity, HUV/AIDS, myelodysplasia, cirrhosis of the specific antibodies, inhibitors, ligands or their analogs can be used as bloactive agente to treat inflammation or disease including viral, bacterial or fungal infections, allergic responses, mechanical injury associated with trauma, hereditary diseases, lymphoma or carcinoma, or other conditions which activate the genes of kidney, lung, heart, ly lymphoid or tissues of the nervous system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated lysolipid/EDG receptor useful in the treatment of asthma and
                                                                                                                                                                                                    EDG-4; polypeptide; receptor; inflammation; amino acid; G protein; lysolipid; immune response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gupta AK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1803; DB 2; Length 353;
Pred. No. 1.7e-177;
1; Mismatches 1; Indels 0
                                                                                                                                                               EDG-4 amino acid sequence encoded by clone pC3-hEDG4#36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vyas TB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peters D, Kooshesh F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ALLX ) ALLELIX BIOPHARMACEUTICALS INC.
                                            AAY28289 standard; protein; 353 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 7; Fig 16B; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0080610P.
                                                                                                                                                                                                                                                                                                                                                                                   98WO-CA001195.
                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Кащьој в,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-430392/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 353 AA;
                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                      WO9935259-A1
                                                                                                                                                                                                                                                                                                                                                                                   30-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                          30-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                        03-APR-1998;
25-NOV-1998;
                                                                                                                          12-OCT-1999
                                                                                                                                                                                                                                                                                                                                          15-JUL-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Munroe DG,
                                                                                   AAY28289;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
        RESULT 3
```

```
The present sequence represents an Edg polypeptide. The specification describes Edg4 and Edg5 polypeptides. The Edg4 gene is located on chromosome 19pl2. The Edg polypeptides are receptors for 1yeophospholipids and sphingolipids, such as lysophosphatidic acid (LPA) and sphingosine 1-phosphate (S1P). The Edg receptor proteins are used for diagnosing an LPA or S1P mediator condition an individual. Edg4 and Edg5 polypeptides can be used in screening assays designed to determine the effects of a candidate bioactive agent on the expression and activity of Edg4 and Edg5 polypeptides, and the function of LPA and S1P. Nucleotide sequences encoding Edg-4 and Edg-5 are useful a hybridisation probes, in chromosome and gene mapping and in the generation of anti-sense RNA and DNA. Nucleic acids which encode Edg4 or Edg5 or their modified forms can also be used to generate either transgenic animals or knock out animals.
VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                          241 VFIVCWLPAFSILLIDYACPVHSCPILYKAHYLFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human polypeptide receptors for lysophospholipids and sphingolipids, native human Edg4, Edg5, mutant of Edg4 comprising extended polypeptide tail, used to screen agents that affect LPA and S1P
                                                                                                                                                                                   301 RPLQCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Edg4; Edg5; lysophospholipid receptor; sphingolipid receptor; S1P; lysophosphatidic acid; LPA: sphingosine 1-phosphate; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amino acid sequence of the human Edg5 polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                     AAB18889 standard; protein; 353 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 13; Fig 3; 67pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-2000; 2000WO-US007649.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00274752.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (REGC ) UNIV CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-638230/61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               An S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; AAA96163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200056135-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        activities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goetzl EI,
                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB18889;
```

ö

0; Gaps

9 9

1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR

Matches 351; Conservative

ð 셤 ò

Best Local Similarity

NSKFHSAMYLFLGNIAASDLLAGVAFVANTLLSGSVTLRLTFVQWFAREGSAFITLSASV

61

```
Similarity
                                                                                                                                                                                                                                                                                                                                                                      10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Takagaki K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-OCT-2002
           350;
                                                                                                                                                                                                                                                                        301
                               _
                                                                                                                                                                                                                                                                                                                                                 ABB98694;
                                                                           61
                                                                                                                   121
                                                                                                                                                                                                         241
                                                                                                                                                              181
                                                                                                                                                                                                                                                   301
 Local
           Matches
                                                                                                                                                                                                                                                                                                                  ABB98694
                                                                                                                                                                                                                                                                                                        RESULT
                                                 g
                                                                                           g
                                                                                                                                      qq
                                                                                                                                                                               g
                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                  g
                               8
                                                                         ò
                                                                                                                 ò
                                                                                                                                                            ò
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                 ò
                               ö
                                                                                              120
                                                                                                                                                              180
                                                                                                                                                                                  240
                                                                                                                                                                                                        240
                                                                                                                   120
                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to Edg receptors (ABP59277-ABP59290). The Edg receptors, are useful in a high-throughput screening assay to identify compounds that bind to or modulate the activity of the polypeptide, in calcium mobilisation assays, binding assays, detection of cAMP formation, or in reporter gene techniques
                                                                                                                                                                                                                            VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                         9
                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New chimeric Edg receptor, useful in high-throughput screening assays, comprises extracellular and transmembrane domains of a first Edg receptor, and a chimeric intracellular domain of a second Edg receptor.
                                                                 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                         FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLDILGWNCLGHLEACS
                                                                                                                                                                                                TVLPLYARGIYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                          VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                   MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                       FSLLAIAIATHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                               Gaps
                                                                                                                                                                                                                                                                                 RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                               ..
           Length 353;
                              Indels
        Score 1787; DB 3;
Pred. No. 7.5e-176;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Spencer JV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 19; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                 Ź
                                                                                                                                                                                                                                                                                                                                                ABP59285 standard; protein; 353
       veery match
Best Local Similarity 99.2%;
Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-JUL-2002; 2002WO-US022346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-JUL-2001; 2001US-00904099
                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ę
                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Munning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-221718/21.
                                                                                                                                                                                                                                                                                                                                                                                                             Human Edg5 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003006503-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CERE-) CERETEK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polypeptide,
cAMP formati
                                                                                                                                                                                                                                                                                                                                                                                                                                   Edg;
                                                                                                                                                                                                                                                                                                                                                                                         10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shankar G,
                                                                                              5
                                                                                                                                                                                                                                                241
                                                                                                                 19
                                                                                                                                       121
                                                                                                                                                            121
                                                                                                                                                                                 181
                                                                                                                                                                                                      181
                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                    ABP59285;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human;
                                                                                                                                                                                                                                                                                                                           RESULT 5
                                                                                            δ
                                                                                                               요
                                                                                                                                      ò
                                                                                                                                                       g
                                                                                                                                                                           ò
                                                                                                                                                                                                   유
                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                        ద
```

```
ö
                                                                                                                                                                                                           180
                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to methods for screening for preventives or remedies for proliferative glomerular nephritis, depending on the inhibitory effect on Endothelial Differentiation Gene, Edg-5, activation. The method is especially useful for screening preventives or remedies for IgA nephritis. The present sequence is human Edg-5, which was used in the method of the invention
                                                                                                             120
                                                                                                                                           120
                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                            241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSKDLRREVL 300
                                                9
                                                                           9
                                                                                                                                   61 NSKFHSAMYLPLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                           FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGMNCLGHLEACS
                                                                                                                                                                                                 181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                             NSKPHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                             MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                           TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                           VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Screening drugs for preventing or treating (mesangial) proliferative glomerular nephritis, based on inhibiting activation of Edg-5 for particularly Edg-5 receptor antagonists.
                                                                                                                                                                                                                                                                                                                                                                                          RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                ö
               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; nephrotropic; proliferative glomerular nephritis;
Endothelial Differentiation Gene; Edg-5; IgA nephritis.
7.5e-176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Endothelial Differentiation Gene, Edg-5.
Pred. No. 7.50
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tsujimoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Page 44; 59pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABB98694 standard; protein; 353
             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (NNSH ) NIPPON SHINYAKU CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-2001; 2001JP-00088018.
06-SEP-2001; 2001JP-00270551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2002; 2002WO-JP002828
99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Katsuma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-018956/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; ABQ81030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200277642-A1.
```

Sequence 353 AA;

98.9%; Score 1787; DB 6; Length 353;

Query Match

```
ö
                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; lymphocyte activation; lymphocyte migration; EDG-5; G-protein coupled receptor; GPCR; lymphocyte; T cell receptor; E cell receptor; D69; gene therapy; asthma; allergy; autoimmune disease; multiple sclerosis; scleroderma; pernicious anaemia; IDDM; insulin-dependent diabetes mellitus; tissue transplant; graft-versus-host disease; inflammation; infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            identifying lymphocyte modulator activation/migration, by contacting an SDG G-protein coupled receptor polypeptide or cell having the polypeptide with compound and determining chemical/phenotypic effect of compound on
                                                                                                                                                                          180
                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                  TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIXCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                                                                                                                                                                                                                                          241 VFIVCWLPAFSILLIDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                           VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                     9
                                                                            1 MGSLYSEYLNPNKYQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                            121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                          1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                    NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                             61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                           PSLLAIAIBEHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                   TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                    301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jiang
    Length 353;
                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhao H,
Score 1787; DB 6;
Pred. No. 7.5e-176;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ບັ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ፫
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pardo J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABU08813 standard; protein; 353
 98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-APR-2001; 2001US-0284763P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-OCT-2001; 2001US-00971228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chu P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-AUG-2003 (first entry)
                Local Similarity 99.2
nes 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIGE-) RIGEL PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-340852/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human EDG-5 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Masuda E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2002155512-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-2002
                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABU08813;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liao XC,
                                                                                                                                                                           121
                                                                                                                                                                                                                                   181
    Query Match
                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                    셤
                                                                                                                    ò
                                                                                                                                             셤
                                                                                                                                                                           ò
                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                    ઠે
```

The invention discloses method for identifying a compound that modulates lymphocyte activation/migration. The method comprises contacting an BDG G-protein coupled receptor (GPCR) family polypeptide, or its fragment or a

Disclosure; Fig 2; 70pp; English.

```
cert counting the chemical/phenotypic effect of the compound upon the cell. determining the chemical/phenotypic effect of the subject a therapeutically also disclosed are methods for modulating lymphocyte activation or anigration in a subject, by administering to the subject a therapeutically effective amount of an identified compound, an EDG polypeptide or a modulators of lymphocyte activation, by transfecting into lymphocytes a consoling for modulating T or B cell receptors of the lymphocytes activation of lymphocyte activation by detecting the level of CDNA library, stimulating T or B cell receptors of the lymphocytes, convening colns that modulate conformed is useful for identifying a compound conform an antibody, antisense molecule, small organic molecule, sphingolipid or a sphingolipid analogue) that modulates lymphocyte activation or migration. The compounds identified are useful for the cativation or migration. The compounds identified are useful for the transment (e.g. gene therapy) of diseases such as asthma, allergy, autoimmune diseases such as multiple sclerosis, scleroderma, pernicious and tissue transplant such as graft-versue-host disease, acute and chronic inflammation, an infection such as viral, fungal, protozoal or bacterial infections and diseases in which activation of immune response and stimulation of lymphocyte migration is desired. The sequence and stimulation are bursal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G protein-coupled receptor; GPCR; antigenic peptide; gene therapy; G protein-coupled receptor modulator; antibody; immune-related disease; growth-related disease; cell regeneration-related disease; ADS; cancer; immunological-related cell proliferation; classes; autoimmune disease; Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy; osteoporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes; graft versus host disease; Parkinson's disease; multiple sclerosis; psoriasis; anxiety; depression; schizophrenia; dementia; memory loss; mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TVLPLYAKHYVLCVVTI PSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
comprising the polypeptide or its fragment with the compound,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human sphingolipid receptor Edg5 protein SEQ ID NO:508.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1787; DB 6;
Pred. No. 7.5e-176;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABP82010 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 99.2
Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABP82010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
The invention relates to a novel method for gene expression analysis by collective quantitative analysis of the expression of a number of genes to identify those that are prometed or inhibited in a given cell or tissue. The genes are preferably gene families such as the G protein gene family. The methods may be used in treatment of cancers, including prostate, ovarian, stomach, bladder, breast, and cancer of the intestines. EDG-1 and EDG-2 receptor agonists and antagonists may be used in treatment treatment and prevention of atheroscelerosis, myocardial infarction, infarct or ischaemic disease of the brain. This sequence represents a protein of human EDG-5 of the invention.
  181 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240
                                                                                        241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G protein coupled receptor; tyrosine oxidase receptor family; ion channel gene family; cancer; EDG-1; EDG-2 receptor; atherosclerosis; myocardial infarction; infarct; ischaemic disease; GPCR; human; EDG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                    VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                         RPLOCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGMIMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Komateu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                              RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Method for gene expression analysis for treatment of cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene expression analysis; collective quantitative analysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fujii R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>ښ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1787; DB 7;
Pred. No. 7.5e-176;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fukusumi S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 46; 261pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                       Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Arai T,
, Ogi K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o;
                                                                                                                                                                                                                                                                                                                                                  ADC40485 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-DEC-2001; 2001JP-00382053.
21-FEB-2002; 2002JP-00045104.
15-MAY-2002; 2002JP-00140111.
18-NOV-2002; 2002JP-00333769.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-DEC-2002; 2002WO-JP013097.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.9%;
99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TAKE ) TAKEDA CHEM IND LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kobayashi M, A.
', Kawamata Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 99.2'
Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein of human EDG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003-533023/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; ADC40486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003052096-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matsumura F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-JUN-2003
                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                         ADC40485;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hinuma S,
                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                RESULT 9
                                                                                                                                                                                                                                                                                                                              ADC40485
                                                                                              g
                                                                                                                                                           ò
                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                              g
                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        caids. Also described: (1) an assay for the detection of a particular of acids. Also described: (1) an assay for the detection of a particular of acids. Also described: (1) an assay for the detection of a particular of protein-coupled receptor (GPCR) or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or avidity for a particular GPCR. (1) can be used as GPCR modulators and in the becapy. The antigenic peptides for GPCRs are useful in detecting an antibodies. The peptides and antibodies are also useful for detecting to antibody against a particular GPCR. The antigenic peptides for cantibodies. The peptides and antibodies are useful for detecting the presence or absence of corresponding GPCRs. The antigenic peptides for GPCRs and antibodies are useful for diagnosing and designing the greating immune-related disease, immunological-related disease, cell regeneration-related disease, immunological-related cell proliferative diseases, or autoimmune diseases, immunological-related cell proliferative catheroscierosis, bacternal, fungal, protozoan or viral infections, osteoporosis, cancer, cardiomyopathy, chronic and acute inflammation, allergies, Crohm's disease, diabetes, graft versus host disease, parkinson's disease, multiple sclerosis, parkinson's disease, multiple sclerosis, prantice, or loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension, candisorder; in which GPCRs are involved. The antibodies may be used in immunosasays and immunodiagness, help antibodies and the condition of the conditi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated antigenic peptides e.g., for G protein-coupled receptors (GPCR), useful for diagnosing and designing drugs for treating conditions in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes antigenic peptides (I) comprising: (a)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TVLPLYAKHYVLCVVIIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVIIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1787; DB 6;
Pred. No. 7.5e-176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, Fig 1; 523pp, English.
                                                                                                                                                                                                                                                                                                                                                  (LIFE-) LIFESPAN BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                                                       Brown JP;
                                                                                                                                                                                                                                                                                             19-DEC-2000; 2000US-0257144P.
                                                                                                                                                                                                                                        19-DEC-2001; 2001WO-US050107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.2%;
Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    Burmer GC, Roush CL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-046718/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ABZ42860.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 353 AA;
                                                                                                                               WO200261087-A2
                                                                          Homo sapiens.
                                                                                                                                                                                    08-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                           ulcer.
```

ö

Gaps

ò 셤 δ 셤 ઠે g ઠ

```
The present invention describes a method for identifying an increase in risk for Type II diabetes mellitus and/or venous thrombosis/pulmonary embolism, comprising determining the presence of amino acid exchange at position 266 from Val to Ala in the EDG5 protein. Also described: (1) a preventing type II diabetes and/or venous thrombosis/pulmonary embolism, where a cell or cell extract is used that contains EDG5 with the amino acid exchange, or the variation in the nucleotide sequence of EDG5 protein or the EDG5-286-AA; (2) a method for adapting the dosage of the pharmaceutical described above by testing the human cell for the presence of EDG5 protein or the EDG5-286-AA; (2) a method of selecting paramaceutical described above by testing the human cell for the presence of EDG5 protein or the EDG5-286-AA; (3) a method of selecting patients who will respond type II diabetes and/or venous thrombosis/pulmonary embolism by testing the probe of the respective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying an increase in risk for Type II diabetes mellitus and/or venous thrombosis/pulmonary embolism comprises determining in a probe the presence of amino acid exchange at position 286 from Val to Ala in the
                                                                                                                                                                                                             300
                                                                                                                                         240
                                                                                                                                                                            240
NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        II diabetes mellitus; venous thrombosis; pulmonary embolism; EDG5; V286A; antidiabetic; thrombolytic; gene therapy; human.
                    NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                       TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADWAAPQTLALLKTVTIVLG
                                                                                                                                                                                                             VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                    241 VFIVCWLDAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                    FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                         TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŝ
                                                                                                                                                                                                                                                                                                     301 RPLQCWRPGVGVGCRRRVGTPGHHLLPLRSSSSLERGWHWPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                    RPLOCWRPGVGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ricard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jacobs M, Deleuze J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; SEQ ID NO 3; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kozian D, Kostenis E, Siegler K,
                                                                                                                                                                                                                                                                                                                                                                                                              ADD11247 standard; protein; 353 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AVET ) AVENTIS PHARMA DEUT GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human EDG5 protein SEQ ID NO:3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-APR-2002; 2002EP-00007879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2003; 2003WO-EP003569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-804314/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; ADD11248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003085130-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2003
                                                                                                                                                                                                                                                                                    301
                                 61
                                                                      121
                                                                                                         121
                                                                                                                                           181
                                                                                                                                                                              181
                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Type II EDGS V28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mace S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EDGS
                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                    ઠે
                                                                                                  유
                                                                                                                                   ઠે
                                                                                                                                                                      셤
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                   a
```

```
patient for the presence of EDG5 with the amino acid exchange, or the variation in the nucleotide sequence of EDG5 protein or the EDG5-286-AA; and (4) a test kit for testing the presence of the amino acid exchange, or the variation in the nucleotide sequence of EDG5 protein or the EDG5-286-AA. EDG5 has antidiabetic and thrombolytic activities, and can be used in gene therapy. The methods are useful for identifying an increase in risk for type II diabetes mellitus and/or thrombosls/plumnary embolism, and for screening pharmaceuticals useful for treating type II diabetes mellitus and/or venous thrombosls/plumonary embolism. The methods are also useful for adapting the dosage of a pharmaceutical useful for treating the above diseases. The methods are useful for sequence represents who will respond to the pharmaceutical. The present sequence represent invention. It is used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor; human; Edg5 receptor; gastrointestinal disorder; cardiovascular disorder; hypertension; diabetes; respiratory disorder; asthma; immune disorder; cognitive disorder; memory disorder; obesity; pain; psychotic behaviour; affective disorder; migraine; cancer; AIDS; wound healing; ischaemia-reperfusion injury-related disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                     FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VFIVCMLPAPSILLLDYACPVHSCPILYKAHYXPAVSTLNSLLNPVIYTWRSRDLRRBVL
                                                                                                                                                                                                                                                                                                                                                                                                                   NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                                                                                                                                                                                                                                   1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                    Length 353;
                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                    98.9%; Score 1787; DB 7;
99.2%; Pred. No. 7.5e-176;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADD90760 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002US-00228762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-00253998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                      Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human Edg5 receptor.
                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                     Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003130493-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ното варіепв.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-FEB-1999;
16-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADD90760;
                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADD90760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

gene;

```
This invention relates to a novel method for identifying an increase in risk for type II diabetes mellitus, venous thrombosis, pulmonary embolism or a combination thereof. Specifically, it refers to a the endothelial differentiation gene 5 (EDG5) located on chromosome 19p13.2, which encodes a G protein coupled receptor protein. The present invention describes an immunochemically reactive labelled antibody based kit that can be used to identify the Val286Ala variation in the EDG5 protein encoded by a single nucleotide polymorphism. Furthermore, this allel encoding the V286A variant represents a genetic marker that can be useful for preventative treatments of the aforementioned diseases, as well as for adapting drug dosage for patients, for drug screening purposes or for patient selection in phase or clinical studies. This polypeptide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying an increase in risk for type II diabetes mellitus, venous thrombosis, pulmonary embolism or its combination in subject by determining whether amino acid residue at position 286 of BDG5 protein is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSASITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS
                                         G protein coupled receptor; EDG5; type II diabetes mellitus; venous thrombosis; pulmonary embolism; endothelial differentiation
Human endothelial differentiation factor 5 (EDGS) protein SeqID 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98.9%; Score 1787; DB 8;
99.2%; Pred. No. 7.5e-176;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       is the human EDG5 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 2.4; SEQ ID NO 3; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Siegler K,
                                                                                                                                                                                                                                                                        21-MAR-2003; 2003US-00393870
                                                                                                                                                                                                                                                                                                                 09-AUG-2002; 2002US-0402305P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 99.2
Matches 350; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kostenis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-060183/06.
                                                                                                                                                                                                                                                                                                                                                         KOZIAN D.
KOSTENIS E.
SIEGLER K.
                                                                                                                                                                                                                                                                                                                                                                                                                            JACOBS M.
DELEUZE J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RICARD S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ADH57162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 353 AA;
                                                                                                                                                                                US2003219808-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACE
                                                                                                                                                                                                                            27-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kozian D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                          (JACO/)
(DELE/)
(RICA/)
(MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alanine.
                                                                                                                                                                                                                                                                                                                                                                                                         (SIEG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mace S;
                                                                                                                                                                                                                                                                                                                                                                                  (KOST/
                                                                                                                                        Ношо
    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid encoding a mammalian Edg7 receptor. The mammalian Edg7 receptor proteins and nucleic acid encoding the proteins are useful for diagnosing and treating an abnormality associated with the activity of the mammalian Edg7 receptors, cdiabetes, respiratory disorder, asthma, immune disorder, hypertension, disorder, memory disorder, asthma, immune disorder, copylitive disorder, migraine, cancer, AIDS, wound healing, or ischaemia-reperfusion injury-related diseases. The nucleic acids and proteins are also useful for developing and designing drugs with higher specificity and fewer side effects. The nucleic acid and antisense oligonucleorides concoling mammalian Edg7 receptors and antisense oligonucleorides complementary to the nucleic acid sequences. The methods are also useful for identifying agonists and antisense oligonucleorides complementary to the nucleic acid sequences. The methods are also useful for identifying agonists and antisense of Edg7 receptors. The present sequence represents the amino acid sequence of the human Edg5 receptor.
                                                                                                                                                                                                                                                   mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                          New mammalian Edg7 receptor proteins and nucleic acids encoding mammaliar
Edg7 receptors, useful for diagnosing and treating an abnormality
associated with the activity of the mammalian Edg7 receptor, e.g. asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
                                                                                                                                                             ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                           Nagorny
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RPLQCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPLOCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 353;
                                                                                                                                                           Wilson A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1787; DB 7;
Pred. No. 7.5e-176;
0; Mismatches 3;
                                                                                                                                                           Salon JA,
                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 19; 64pp; English
                                                                                                                                                           Borowsky BE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH57161 standard; protein; 353 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 99.2
Matches 350; Conservative
                  HUANG L Y.
BOROWSKY B E.
SALON J A.
                                                                                                                                                        Bonini JA, Huang LY,
                                                                                                                                                                                                    WPI; 2003-829581/77
                                                                                                                                                                                                                                                                                                               migraine or cancer.
BONINI J A.
                                                                                                            NAGORNY R.
                                                                                        WILSON A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                     (WILS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                    HUAN/)
                                              BORO/)
                                                                   (SALO/)
```

Ricard S;

Deleuze J,

Jacobs M,

120

9 9

ö

Indels

Length 353;

180 240 240

TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG

181 181

ò

g

(first entry)

25-MAR-2004

ADH57161

RESULT 12

a

ò 셤 8

ઠે

셤

ò 8 ò

Gaps

ö

3; Indels

Mismatches

ö

```
350; Conservative
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AD029293
                                   ઠે
                                                             원
                                                                                                   δ
                                                                                                                               셤
                                                                                                                                                                      ò
                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound 8-80 nucleobases in length targeted to, and which specifically hybridises with a nucleic acid molecule encoding endothelial differentiation gene 5 (EDG5, a G protein coupled receptor, involved in development, wound healing, tissue regeneration, cellular proliferation, apoptosis, cancer, angiogenesis and inflammation), and inhibits the expression of EDG5, i.e. is an antisense (AS) oligonucleotide. Also included are a composition comprising the compound and a carrier or diluent and a method for screening an antisense compound (by contacting a preferred target region of a nucleic acid molecule encoding EDG5 in preferred target region and selecting for one or more candidate antisense comprising at least an 8-nucleobase portion that is complementary to the preferred target region and selecting for one or more candidate antisense compounds to composition and methods are useful for treating a disease or condition associated with EDG5, such as a hyperproliferative disorder, developmental disorder or a disease or condition arising from aberrant modulating the expression of EDG5. Experimental prococols are described but no results are given. The present sequence is the human EDG5 protein.
                241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYPFAVSTLNSLLNPVIYTWRSRDLRREVL 300
 241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                                                                                    endothelial differentiation gene 5; EDG5; G protein-coupled receptor; development; wound healing; tissue regeneration; cellular proliferation; apoptosis; cancer; angiogenesis; inflammation; hyperproliferative disorder; developmental disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotide targeted to nucleic acid encoding endochellal differentiation sphingolipid G-protein-coupled receptor 5, for treating cancer, developmental disorder or a condition arising from aberrant apoptosis.
                                                                                      301 RPLQCWRPGVGVQGRRRVGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                    301 RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1787; DB 8; Length 353;
Pred. No. 7.5e-176;
                                                                                                                                                                                                                                                                                                    Human endothelial differentiation gene 5 protein.
                                                                                                                                                                                                                                                                                                                                       antisense gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 31-32; 50pp; English.
                                                                                                                                                                                              Ź
                                                                                                                                                                                          ADJ62652 standard; protein; 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.9%;
99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-2002; 2002US-00215821.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-AUG-2002; 2002US-00215821.
                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2004-179674/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; ADJ62544.
                                                                                                                                                                                                                                                                                                                                           receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 353 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004029274-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens.
                                                                                                                                                                                                                                                                 06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-FEB-2004
                                                                                                                                                                                                                               ADJ62652;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ношо
                                                                                                                                                                               ADJ62652
                                                                                                                                                                                              셤
                                                                    ò
                                                                                                   셤
```

```
KW g protein-coupled receptor; GPCR; drug screening; diagnosis;
KW transgenic mouse; neurological disorder; adrenal gland disorder;
KW colon disorder; intestinal disorder; cardiovascular disorder;
KW muscular disorder; blood disorder; immune disorder; bone disorder;
foint disorder; liver disorder; nutritive disorder; cancer;
KW kidney disorder; liver disorder; prostate disorder; testis disorder;
KW disorder; throad disorder; pancreas disorder; spleen disorder;
KW kin disorder; thyroid disorder; pancreas disorder; spleen disorder;
KW cytostatic; antiinflammatory; vasorropic; antidastribeic;
KW CNS; central nervous system; respiratory; antidastribeic; antidabetic;
Virucide; hepatotropic; antibacterial; antialergic; anorectic;
KW dermatological; antiulcer; antithyroid; antiallergic; anorectic;
KW immunosuppressive; nephrotropic; gene therapy; GPCR modulator; human;
                                                                                    180
                                                                                                                                                           240
                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                             VFIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                                                                                                                                                                                                                                                                               241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 300
                                9
 9
                                                                                                                                                                                                                            1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                                                                                                                                                        TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG
1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR
                                                                  NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel mammalian G protein coupled receptors, useful for identifying
                                                                                                                                                                                                                                                                                                                                                                    RPLQCWRPGVGVQGRRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Li F;
Zeng H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J,
Madisen L, Mcilwain KL, Pavlova MN, Vassilatis D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AD029293 standard; protein; 353 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GPCR EDG5, SEQ ID NO:394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-2002; 2002US-0409303P. 09-APR-2003; 2003US-0461329P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-2003; 2003WO-US028226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-390329/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PRIM-) PRIMAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ADO29865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO20040400000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AD029293;
                                                                    61
                                                                                                                                       121
                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               receptor
```

compounds that modulates diagnosing and treating disease condition associated with GPCR dysfunction e.g. autoimmune diseases, angina pectoris, Parkinson's disease.

(first entry)

12-AUG-2004

ADOS 7997;

Claim 151; SEQ ID NO 394; 542pp; English.

The invention relates to human and mouse G protein-coupled receptors (GPCRs) and nucleic acids encoding them. The invention also relates to sequences at least 90% identical to the GPCR proteins and nucleic acids of the invention; methods of treating, preventing or diagnosing diseases of the invention; methods of treating, preventing or diagnosing diseases compounds useful in the treatment of GPCR-related diseases; a transgenic compounds useful in the treatment of GPCR-related diseases; a transgenic mouse comprising a GPCR gene of the invention; a mouse comprising a GPCR gene of the invention and kite comprising a mutation in a different GPCR gene of the invention. The invention in a different GPCR polymuclectides of the invention. The invention further discloses variants of the GPCR polypeptides and vectors comprising a GPCR uncleic acids and proteins may be used in the diagnosis, treatment or prevention of a wide variety of diseases including neurological disorders (e.g., Alzheimer's disease, disease, disease or schizophrenia); chisorders of the adrenal gland; disorders of the colon or intestine compounds disease, diarkhoea, food poisoning or irritable bowel syndrome); cardiovacular disorders (e.g., angina, cardiac arrhythmia or myocardial infarction); muscular disorders (e.g., autoimmune disorders (e.g., antoimmune disorders (e.g., autoimmune disorders (e.g., obselty, enzyme deficiency-related diseases or vitamin disorders of the kidney, liver, lung, breast, ovary, cuerns, prostere, teetles, shin, stomach, panceases, spleen, thymus and charactis, promers of the kidney, liver, lung, because of the myorder of the full sequence data for this patent did not form particles of the present sequence sor this patent did not form particles of the present sequence sor this patent and protein and diso electronic format directly from WIPO at ftp.wipo.int/pub/published pct_sequences.

Sequence 353 AA;

ö 300 VPIVCWLPAFSILLLDYACPVHSCPILYKAHYXFAVSTLNSLLNPVIYTWRSRDLRREVL 300 9 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV FSLLAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 241 VFIVCWLPAFSILLLDYACPVHSCPILYKAHYFFAVSTLNSLLNPVIYTWRSRDLRREVL 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR FSLLAIAIAIERHVAIAKVKLYGSDKSCRMLLLIGASWLISLVLGGLPILGWNCLGHLEACS TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG Gaps RPLOCWRPGVGGRRRGGTPGHHLLPLRSSSSLERGMHMPTSPTFLEGNTVV 353 ; 0 Length 353; 3; Indels 98.9%; Score 1787; DB 8; 99.2%; Pred. No. 7.5e-176; ive 0; Mismatches 3; Best Local Similarity 99.2 Matches 350; Conservative Query Match Best Local Similarity 61 61 121 121 181 181 241 301 301 셤 ò g ò g ò 셤 ò 8

ADO57997 standard; protein; 353 AA.

RESULT 15 ADO57997

cumputables; usequebating useases such as a carturovascular diseases, disorders of the gastroenterology system, reproductive diseases, disorders of the peripheral and central nervous system, and respiratory diseases in a mammal. The invention also comprises a pharmaceutical composition for the treatment of the diseases above comprising an EDG5 polypeptide, an EDG5 polypeptide, or a therapeutic agent which binds comprised, an antibody, or a ribozyme; and preparation of a polypeptide, an antibody, or a ribozyme; and preparation of a polypeptide, an antibody, or a ribozyme; and preparation of a polypeptide, an antibody, or a ribozyme; and preparation of a compositions have the following activities; analgesic, antiarrhythmic, antiarteriosclerotic, antiasthmatic, antiabcterial, antiarrhythmic, antiarteriosclerotic, antiasthmatic, antiabcterial, antiarrhythmic, antiarteriosclerotic, antiasthmatic, antiabcterial, composition for treating the above-defined corropic, vasotropic, and virucide. The regulators of EDG5 are useful corropic, vasotropic, and virucide. The regulators of EDG5 are useful corropic, vasotropic, and virucide. The regulators of EDG5 are useful corropic, and disorders of the peripheral and central nervous reproductive diseases, disorders of the gastroenterology system, correlations, and respiratory diseases in a mammal. They are also useful for the regulation of EDG5 activity in a mammal having the disease. Cardiovascular disease, includes heart failure, myocardial infarction, ischaemia, arriththmiae, and atherosclerosis. Examples of disorders of disorders of gastricis, gastric ulcers, and chronic pancreatitis. Examples of cardiovascular disorders are syphilis, gantal watts, importence, vaginitis, dysemenorchoes, and infertility Disorders of the peripheral and central nervous system include Parkinson's disease, dementia, multiple sclerosis, crocke, and Alzheimer's disease. Respiratory diseases can be asthma or EDG5; cardiovascular disease; gastroenterology system; reproductive; peripheral; central nervous system; respiratory; analgesic; antiarrhythmic; antiarteriosclerotic; antiasthmatic; antibacterial; antiinfermatory; antiparkinsonian; antiulcer; cardiant; cerebroprotective; dermatological; synecological; neuroprotective; nootropic; vasotropic; virucide; human. Screening for therapeutic agents, useful for treating e.g. respiratory disease, comprises contacting a test compound with endothelial differentiation sphingolipid G-protein-coupled receptor 5 polypeptide and agents. The method comprises contacting a test compound with an endotherlial differentication sphingoliphid G-protein-coupled receptor 5 (EDGS) polypeptide or polymucleotide and detecting binding of the test compound, or determining EDGS polypeptide activity at a certain test compound concentration or in the absence of the test compound and at a different concentration of the test compound. The invention further comprises: diagnosing diseases such as a cardiovascular diseases, The invention relates to a novel method for screening for therapeutic endothelial differentiation sphingolipid; G-protein-coupled Disclosure; SEQ ID NO 2; 119pp; English. Ë Summer 31-OCT-2003; 2003WO-EP012122. 13-NOV-2002; 2002EP-00025098. Human EDG5 receptor protein. (FARB ) BAYER HEALTHCARE AG. Golz S, Brueggemeier U, WPI; 2004-449580/42. detecting binding. N-PSDB; ADO57996. WO2004044587-A2 Homo sapiens. 27-MAY-2004. 

us-10-084-507b-17.rag

`¥-

```
chronic obstructive pulmonary disease. The nucleotide sequences encoding EDG5 are useful as hybridization probes, in constructing oligomers for PCR, for chromosome and gene mapping, in the recombinant production of EDG5, in generating antisense DNA or RNA and in molecular biology techniques that have not yet been developed. EDG5 polypeptides are useful for immunising a mammal to produce polyclonal antibodies and for diagnostic purposes. This sequence represents the human EDG5 receptor protein of the invention.
                       888888888888
```

Sequence 353 AA;

ö 120 180 180 TVLPLYAKHYVLCVVTIFSIILLAIVALYVRIYCVVRSSHADMAAPQTLALLKTVTIVLG 240 NSKFHSAMYLFLGNLAASDLLAGVAFVANTLLSGSVTLRLTPVQWFAREGSAFITLSASV 120 9 1 MGSLYSEYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR Gaps 1 MGSLYSBYLNPNKVQEHYNYTKETLETQETTSRQVASAFIVILCCAIVVENLLVLIAVAR ö Score 1787; DB 8; Length 353; Pred. No. 7.5e-176; 0; Mismatches 3; Indels C Query Match 98.9%; Best Local Similarity 99.2%; Matches 350; Conservative ( 61 61 121 121 181 181 셤 ò 셤 ઠે 셤 ઠે 셤 Š g

completed: December 4, 2005, 06:46:53 Search completed: Do Job time: 133 secs

RPLOCWRPGVGVQGRRGGTPGHHLLPLRSSSSLERGWHMPTSPTFLEGNTVV 353

301

ŝ

:

